

PAMPHLET BOX

Microbiology Abstracts: Section A

Industrial & Applied Microbiology

Sci.

Volume 19 number 12
Annual Indexes to Volume 19 1984

U.I.C.

FEB 1 1985

LIBRARY

ISSN 0300-838X

Cambridge Scientific Abstracts

Subscriptions

An annual subscription to Microbiology Abstracts, Section A includes twelve monthly issues, each containing author and subject indexes and the twelfth issue comprising the annual cumulation of both indexes. Subscriptions are entered on a calendar year basis only.

Annual subscription rates

Full details of surface and air delivery rates in the various geographical areas shown below can be obtained from the appropriate office or agent.

Japan

US Asiatic Company Limited,
Tsutsumi Building,
13-12 Shimbashi 1-chome,
Minato-ku, Tokyo 105, Japan

India, Sri Lanka, Bangladesh, Nepal, Burma, Malaysia, Singapore, Indonesia and Thailand

Universal Subscription Agency Pvt. Ltd.,
117/Y-1/294 Model Town,
Pandu Nagar, Kanpur 208005,
India

Israel

N.P.K. Meida Ltd.,
P.O. Box 10127,
Tel-Aviv 61101,
Israel

Rest of the world

Cambridge Scientific Abstracts,
5161 River Road,
Bethesda, MD 20816, USA

©1984 Cambridge Scientific Abstracts rights reserved by publisher. No part of publication may be reproduced or transmitted in any form by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Microbiology Abstracts, Section A (0300-838X) is published monthly for US\$100 per year by Cambridge Scientific Abstracts, 5161 River Road, Bethesda, MD 20816. Second class postage paid at Bethesda, MD. POSTMASTER: Send address changes to Cambridge Scientific Abstracts, 5161 River Road, Bethesda, MD 20816.

Published and printed by Cambridge Scientific Abstracts, 5161 River Road, Bethesda, MD 20816.

Microbiology Abstracts®: Section A

Industrial & Applied Microbiology

Volume 19 number 12

Annual Indexes to Volume 19 1984

Editorial staff

Barbara B. Engel

Ray Fisher

Lawrence L. Pilon

Nicholas Ruth III

Darrell D. Stover

ISSN 0300-838X

Foreword

Microbiology Abstracts, Section A

commenced publication in 1965 and is published monthly. Each issue contains approximately 900 abstracts followed by author, patentee and assignee, and subject indexes.

Coverage

In compiling each month's issue, CSA's editorial staff monitors approximately 5,000 primary journals as well as patents and other source references for papers falling within the scope of Microbiology Abstracts, Section A.

Subject scope and arrangement of subject matter

The table of contents shows the full scope of the journal.

Abstracts are allocated to the section (subsection) to which they are most relevant and cross-referred to other sections (subsections) where appropriate.

Using this journal

Full details of the bibliographic data cited for each abstract and of abbreviations used can be found in the first issue of this volume.

Author Index

- Adams, J.C. 4135.
Adams, L.B. 9286.
Adams, M.A. 5541.
Adams, M.J. 2027.
Adams, M.R. 6999.
Adams, M.W.V. 7731, 8554.
Adams, N.N. 8880.
Adams, R.P. 1505.
Adams, S.J. 7507.
Adams, S.N. 2998.
Adams, S.S. 4434.
Adams, T.J.H. 7630.
Adams, T.M. 2998.
Adams, W.N. 2389, 9242.
Adamson, S.R. 3522.
Adamson, W.C. 8903.
Adanov, N.I. 866.
Adb-Alla, M.A. 9102.
Adderly, D.D. 6725.
Adducci, P. 8740.
Addy, M. 2424, 2425, 4966.
Adeniji, A.A. 3862.
Adesanya, S.A. 5520.
Adesiyun, A.A. 8897.
Adhya, L.K. 377, 1273.
Adisa, V.A. 2049.
Adlakha, K.L. 5472.
Adlard, M.W. 4063.
Adler-Storitz, K. 4154.
Adler, H.I. 5919.
Adlington, R.M. 6519, 6528, 9195.
Adman, E.T. 25023, 8928.
Admassu, W. 157, 8655.
Ado, Y. 9.
Adomako, D. 2437.
Adre, L. 5837.
Adre-Amankwa, B. 3475.
Aducci, P. 8809.
Ae, N. 324.
Aebig, J. 5892.
Afzal, M. 2314.
Afzal, N. 6883.
Agaeva, R.A. 6440.
Agarwal, S.P. 2007.
Agarwal, V. 5525.
Agarwal, V.K. 8930.
Agathos, S.N. 1375.
Agbalka, F. 1494, 4150, 4930.
Agbanihior, D.E. 709.
Agbomo, H.O. 1677.
Agiolano, A.M. 5884.
Agnese, G. 5916.
Agnihotri, J.P. 2028.
Agrawal, A.K. 92.
Agrawal, H.S. 8253.
Agrawal, S.C. 5648.
Agiros, G.N. 3903.
Agudelo-Silva, F. 8630.
Agyagi, T. 3175.
Ahanonowitz, Y. 2257, 5148, 5197.
Ahearn, D. 808, 4753, 5870.
Ah, P. 4571.
Ahlawat, Y.S. 8860.
Ahlert, R.C. 4084.
Ahlin, P.A. 3339.
Ahqvist, A.-S. 8153.
Ahlwaala, G.S. 1558, 4980.
Ahmad Khan, D. 7870.
Ahmad, A. 9229.
Ahmad, F. 9163.
Ahmad, I.B. 8822.
Ahmad, K.B. 7640.
Ahmad, M.H. 5713.
Ahmad, N. 7288.
Ahmadi, A.A. 262.
Ahmed, A. 8575.
Ahmed, F.S.M. 1355.
Ahmed, K.A. 7087.
Ahmed, R.-E. 9250.
Ahmed, S.A. 124, 7370.
Ahmed, S.I. 8999.
Ahmed, S.R. 3878.
Ahmed, S.Y. 204.
Ahne, B.-K. 6150.
Ahne, W. 5888.
Ahrens, J. 8364.
Ahrens, W. 7948.
Ahning, B.K. 3263.
Ahuja, A.K. 3586.
Ahlu, S. 3042.
Ai, C.-X. 4996.
Aiba, S. 6042, 8502, 8543, 9296.
Aichele, M.D. 3812, 6251.
Aida, K. 9299.
Aida, T. 2157, 4876, 9074.
Aist-Abdelkader, N. 1815.
Aimi, N. 7478.
Aitken, A. 900.
Aitken, J. 9087.
Aivasidis, A. 4122, 4123.
Aizawa, K. 4161, 8647.
Ajami, S.M. 7092.
Ajayi, O. 1989.
Ajibola, O.O. 3722.
Ajima, A. 6033.
Ajmal, A.H. 1117.
Ajmal, M. 9229.
Akama, K. 729.
Akamatsu, N. 2273.
Akao, Y. 3251.
Akash, S. 2497.
Akavot, A.K. 3996.
Akera, H.A. 375.
Akers, K. 3271.
Akhtemova, Z.R. 6852.
Akhtar, R. 6803.
Akimenko, V.K. 9045.
Akin, D.E. 4428, 6397.
Akin, E. 2393.
Akingbohunbe, A.E. 7154.
Akin, T. 1772.
Akita, H. 3560, 3561, 4399, 6096; 6097, 6098.
Akiyama, Y. 654.
Akkerman, W. 6584.
Akkermans, A.D.L. 2969, 4594, 8151, 8158, 8499.
Akimenko, L.V. 6870.
Akaparov, V.Kh. 4288.
Aksenova, I.A. 7455.
Aktas, H. 1987.
Akushi, C.O. 1090.
Akulov, K.I. 4928.
Al-Awadhi, N. 8515.
Al-Delaimy, K.S. 4747.
Al-Delami, N. 574, 2079.
Al-Hazmi, A.S. 5399.
Al-Hindawi, A.K. 4132.
Al-Hitti, J.K. 3057.
Al-Jebouri, M.M. 8424.
Al-Nakhli, M.M. 1326, 7415.
Al-Nuri, M.A. 6573, 8583.
Al-Rashidi, R.K. 4663.
Al-Shahwani, M.F. 4132.
Al-Zarar, A.J. 3930.
Ala El-Din, M.N. 7284.
Alabran, D.M. 4326.
Alaib, M. 5724.
Alam, M.S. 8895.
Alani, D. 1307.
Alarcon, B. 8334.
Alattassova, T. 7453.
Alazar, D. 3736.
Albagac, G. 6818, 8671.
Alberghina, L. 6128.
Albers, A.C. 2450.
Albert, K. 8372.
Albertini, L. 9141.
Albertsman, P.-Ae. 140.
Alcorn, W.E. Jr. 427.
Albrecht, H. 6684.
Albrecht, K.D. 434.
Albrecht, P. 5003.
Albrecht, T.B. 7038.
Albrecht, R. 8075.
Albright, L.J. 6460.
Albritton, W.L. 3027.
Alcaide, E. 9046, 9259.
Alcock, S. 7341.
Alconero, R. 112, 1113.
Alcorn, S.M. 2845, 8035, 8044.
Alderson, G.L. 4197.
Aldon, E. 6392.
Aldon, E.F. 5615.
Aldrich, H.C. 1275, 6397.
Aldridge, K. 7248.
Aldridge, K.E. 666, 3093, 9159.
Aldwinckle, H.S. 2803.
Aleksandrova, G.I. 7482, 7484.
Aleksyeva, G.S. 947.
Alemezadeh, I. 8551.
Alexander, B. 3185, 7638.
Alexander, G.A. 4197.
Alexander, H.M. 7192.
Alexander, I.J. 5552.
Alexander, J.C. 1709.
Alexander, K.C. 1993.
Alexander, M. 2951, 3685, 6944, 6945, 8241, 9017, 9224.
Alexander, S.A. 3919.
Alexandrova, G.I. 5808.
Alexandrova, I.K. 477.
Alexandrova, N.M. 8862.
Alexeev, A.N. 4396.
Alfani, A. 2991.
Alfaro, G. 429.
Alfenas, A.C. 366.
Alford, E.S. 7038.
Alford, R.H. 4808.
Ali, R. 7427.
Ali, Sali, M. 3718.
Ali, A. 6084, 6085.
Ali, A.M. 7084.
Ali, L.A. 5347.
Ali, L.H.M. 1850, 5250.
Ali, M.Z. 5288.
Ali, M.Z.H. 4643.
Ali, S.A. 4132.
Alichanidis, E. 2741.
Alivizatos, A.S. 8030.
Allyeva, R.M. 2700.
Allais, J.J. 856, 929, 1782, 2614.
Allen, W.H. 5036.
Allard, R.W. 316.
Allden, H.S. 4027.
Allerman, E.E. 4905.
Allen-Austin, D. 4937.
Allen, B.J. 3492.
Allen, B.R. 5301.
Allen, B.W. 2417.
Allen, D.C. 5017, 5160.
Allen, D.J. 3783, 3784.
Allen, F.H.E. 2088.
Allen, J. 566.
Allen, J.R. 1503.
Allen, M.F. 385, 828.
Allen, N.K. 427.
Allen, N.K. 3720.
Allen, S.E. 3645.
Allen, T.C. 3832, 8665.
Allermann, K. 2341.
Allgaier, H. 2301.
Alli, I. 2744, 2754, 3724.
Allievi, G. 8384.
Allison, S.K.D. 6345.
Allison, D.G. 5060.
Allioati, G. 8745.
Alis, R. 6083.
Allsop, K. 4936.
Allsop, D. 1040, 1296.
Allwood, M.C. 9145.
Almeida, C. 5286.
Almeida, R.J. 434, 759, 771, 1422.
Almond, J.W. 6624.
Alonso Jimenez, E. 4411.
Alonso, A. 5716.
Alonso, R. 4411.
Alpegiani, M. 6345.
Alper, M. 8816.
Alpizar, L. 3415.
Altop, R.M. 8617.
Altmeyer, W.A. 1518.
Althaus, H. 2369.
Altona, R.E. 2338.
Altosaar, I. 5269, 6125.
Altshuh, D. 5566.
Altwegg, M. 4027.
Altward, C. 6915.
Altward, J. 5460.
Alvarez, A.M. 1164, 5469.
Alvarez, I.F. 5579, 5581, 5607.
Alvarez, M.E. 5119.
Alvarez, R.J. 1730.
Alves de Lima, M. 1999.
Alves, M.N. 7535.
Alves, S.B. 5266, 6908.
Alviano, C.S. 1945.
Alving, C.R. 5064.
Aly, A.-E.N. 7064.
Alyokov, N.M. 7464.
Amadi, S. 8075.
Aman, P. 2895.
Aman, E. 6611.
Amano, K.-I. 3759, 4476, 4477.
Amano, S. 2286.
Amano, Y. 121, 4848.
Amarger, N. 7270.
Amato, M. 5685.
Ambarsumian, A.D. 3227.
Ambasht, R.S. 6320.
Amborski, L.T. 7762.
Ambrosoli, G. 3345.
Ambroz, A. 4962.
Amedei, G.C. 8745.
Amelina, D.Sh. 4342, 4346, 5991, 7744.
Amelina, S. 7476.
Amend, F. 1056.
Amend, F.D. 6662.
Amen, F.A. 8300.
Amerhanova, N.N. 1005, 4432.
Amerson, H.V. 362.
Ames, R. 1259, 8215.
Ameys, M. 2613, 4347, 8592.
Amico, L.A. 8951.
Amikura, T. 6041.
Amin, M.M. 7543.
Aminfar, S. 3035.
Amirova, S.M. 7311.
Amir, M.S. 6020.
Amirati, J.F. 2546.
Amoorhy, N.S. 1858.
Amorao, A. 6267.
Amoros, M. 8325.
Amortegui, A.J. 5002.
Amos, W.T. 5381.
Ampel, N.M. 6435, 8504.
Ambsbaugh, S.M. 6725.
Amsterdam, D. 698, 4180.
Amu Singh, S. 2067, 8793.
Amund, O. 7309.
Amundsen, S.K. 5006.
Amey, S.G.B. 9053.
An, C.S. 4370.
Anagnostakis, S.L. 368, 8183, 8184.
Anan'eva, E.P. 6054.
Ananichev, A.V. 5170.
Ananthanarayanan, T.V. 7160.
Ananthaswamy, R.C. 5271.
Ananyev, E.P. 5198.
Ananyina, V.M. 6870.
Anciaux, Y. 6476.
Andar, P. 1010, 1886, 2705.
Anders, W. 659.
Andersen, B. 2066.
Andersen, K.B. 469.
Andersen, K.E. 7704.
Andersen, S.G. 7330.
Andersen, A.C. 1284, 7493.
Anderson, J. 3056, 8767.
Anderson, B.N. 7288.
Anderson, D. 5914.
Anderson, D.G. 2739.
Anderson, G.K. 2352.
Anderson, J.A. 5252.
Anderson, J.E. 8974.
Anderson, J.M. 5224.
Anderson, J.R. 7246.
Anderson, L.J. 6243.
Anderson, L.J. 6243, 7566.
Anderson, L.A. 1562.
Anderson, N.A. 282, 1199.
Anderson, R.J. 8431.
Anderson, R.L. 452, 581, 796, 2921, 6723, 7359.
Anderson, S.E. 451.
Anderson, J. 1422.
Anderson, E. 140, 3687, 6531, 7438.
Anderson, L.A. 1773.
Anderson, P. 7103.
Anderson, P.-A. 4139.
Andersson, L.-E. 3469.
Ando, T. 3134, 7756.
Andrade-Soto, N. 7210.
Andre, A. 5028.
Andre, L. 4100.
Andreadis, T.G. 2851, 2665.
Andreasen, L.-E. 3469.
Andreev, D.P. 3952.
Andreevskaya, V.I. 5239.
Androni, G. 5926.
Androni, V. 2715.
Androiti, R. 3492.
Androiti, M.W. 8788.
Andresen, O. 4385.
Andreu, D. 4732.
Andrews, D.A. 8272.
Andrews, D.J. 8814.
Andrews, F. 3976.
Andrews, J.H. 1217.
Andrews, J.M. 537, 1431, 6448, 6454.
Andrews, W.H. 6182.
Andrianova, L.E. 1793.
Andriantsimavona-Clotia, M. 4997.
Andriantsimavona-Clotia, M. 4997.
Andriana, V.N. 9333.
Andrus, C.R. 867.
Andrusenko, I.T. 477.
Andruszkiewicz, R. 1429.
Anela, R.K. 2053.
Anelak, I.P. 477.
Anet, F.A.L. 990.
Angarano, G. 7565.
Angheim, P. 6554.
Angel, J.L. 752.
Angela, G.C. 8508, 6509, 6526.
Angelini, N.M.C. 2265, 2266.
Angelini, N.N.C. 4852.
Angermaier, L. 3448.
Angelova, M. 4572.
Anguian, T. 3988, 3981, 7524.
Anguian, R. 3976.
Anhalt, J.P. 1635.
Anifantakis, E.M. 2741.
Anikumar, Y. 7968.
Anikumar, T.B. 4588.
Anin, V. 3015.
Anisimova, L.A. 1008.
Anjanayulu, A. 2072.
Anjos, J.R.N. 6228.
Anken, M. 603.
Anklova, V.N. 5995.
Ann, B.J. 699.
Anno-Nyako, F.O. 3784.
Anno, M. 2290.
Anpiologova, L.K. 2886.
Ansel, M. 4226.
Anselmo, A.M. 8685.
Anson, A.E. 2110.
Anspach, G.J. 7511.
Anstey, R.J. 5041.
Antal, M. 4716, 5715.
Anticiff, A.J. 8859.
Antibes, S. 4192.
Antheusse, J. 1031, 6339, 6879.
Anthony, B.F. 325, 3259.
Antibus, R.K. 2103.

- Antohi, M. 2489.
Antoni, D. 462.
Antoni, F. 1775.
Antoniw, J.F. 1141, 8076, 8928.
Antoun, H. 8234, 8922.
Antunes Ribeiro, L.J. 5440.
Antunes, S. 5702.
Anusuya, D. 7248.
Anzai, H. 1314.
Anzietoli, G. 3032.
Aoki, H. 1435.
Aoki, K. 2708, 6162.
Aoki, T. 3989, 6521.
Aoki, Y. 3044.
Aoyagi, T. 5164, 5957, 6804.
Aoyama, H. 1437, 3167.
Aoyama, Y. 944, 945.
Apiron, D. 2569.
Apoteker, A. 1454.
Appel, D.N. 8189.
Appelbaum, P.C. 1657.
Appelt, K. 7662, 7663.
Apple, A.E. 3805.
Apple, J.D. 4562, 7925.
Appelmann, M.D. 4752, 7409.
Apte, S.K. 6381.
Aquadone, E. 5935.
Aquilari, A.M. 5598.
Aquinio, G.B. 6291.
Aragaki, M. 5450.
Aragno, M. 7503.
Arai, M. 2302.
Arai, T. 957, 3144, 3145, 4871.
Arai, Y. 3148, 8686.
Arai, G.F. 2523.
Arakawa, M. 2637.
Araki, F. 2892.
Araki, H. 2261.
Araki, K. 6550.
Araki, T. 5135.
Araki, Y. 7859.
Arango-Ruiz, G. 4149.
Aranguren, J. 5624.
Araragi, M. 7492.
Araujo, E.F. 1740.
Araujo, J.M. 6878.
Aravitzky, R.A. 3113, 7378.
Arbeter, A.M. 4072, 4777.
Arbige, M. 6778.
Arbuckle, W.B. 2379.
Arcamone, F. 534.
Arcas, J. 778.
Arceneaux, J.E.L. 6444.
Archer, D.B. 3002, 3003, 3964, 9316.
Archer, G.L. 8359.
Archer, S.A. 1143, 8788.
Archibald, E.R. 1372.
Arcuri, E.J. 518.
Arculeanu, J. 2489.
Arelano Baltasar, C. 4394.
Arenhoevel, C. 4475.
Arents, J.C. 3455.
Arovalo, G. 5379.
Aronson, Y. 6673.
Aro, D.G. 2363.
Argoudelis, A.D. 2297.
Arhammer, M. 2840.
Arias, J.M. 5248.
Arima, K. 1823, 2246, 2255.
Arima, Y. 2955, 2994, 8236.
Arimitsu, Y. 729.
Arioli, V. 6571.
Arisawa, M. 1399.
Arison, B. 8380.
Arison, B.H. 1427, 3165, 6562.
Arita, M. 1938.
Arko, R.J. 687.
Ariete Mascarenhas, M. 2693.
Arlinghaus, R.B. 6648.
Armisen, E. 3719.
Armfield, A.Y. 1576.
Armstrong, W.B. 8475.
Armstrong, I.M. 6553.
Arnold, M.T. 3191, 7513.
Armon, R. 6750.
Armour, J.W., Jr. 8071.
Armstrong, C.H. 740, 5694.
Armstrong, D. 1529, 2241.
Armstrong, D.W. 172, 3664, 4389, 8516.
Armstrong, J.C. 430.
Armstrong, J.G. 578.
Armstrong, J.L. 6433.
Armstrong, N.E. 4896.
Arnau, A. 7433, 4271, 6955.
Arnett, D. 343.
Arnett, G. 5748, 6478.
Arnheiter, H. 9111.
Arnold, B. 9295.
Arnold, J.D. 1175.
Arnold, M. 3048.
Arnold, M.K. 1238.
Arnold, W. 6538.
Arnold, A. 3059.
Amon, R. 4078, 6601, 6654.
Arnott, R.A. 2957.
Arnoux, P. 1716.
Arnoff, S.C. 4153.
Aronovici, A. 3170.
Aronson, A.I. 4487.
Aranson, J.N. 1733.
Arora, H.S. 2178.
Arora, S.K. 5781.
Aripino, A. 6158.
Arrabal, F. 1499.
Arraras, E. 7786.
Arrandale, R.F. 5686.
Arrhenius, S.P. 5506.
Arrowsmith, J.E. 6534.
Arroyo, R.L. 1755.
Arroyo, T. 1148.
Arshad, M. 6081.
Arslanian, M.L. 6854.
Art, H.N., Jr. 5933.
Art, D. 8762.
Arthur, M.F. 3951, 5937, 8257.
Artis, W.M. 516, 1336.
Artman, M. 791.
Arutcheva, A.A. 3079.
Arvin, E. 2356.
Arya, A. 8876.
Arz, C. 9041.
Asada, M. 169.
Asagiri, M. 5886.
Asahi, Y. 3096.
Asai, N. 39.
Asai, Y. 7550.
Asano, K. 3483.
Asano, O. 8371.
Ash, R.J. 4740.
Ashdown, N. 7327, 9066.
Asher, M.J.C. 2067, 5498.
Ashida, S. 7114.
Ashley, C.R. 1555, 3242.
Ashley, K.C. 6727.
Ashour, M. 4957.
Ashour, M.M. 2734, 9264.
Ashton, F.E. 1453.
Ashton, J.K. 1585.
Ashworth, D.M. 6175.
Ashworth, L.J., Jr. 1149.
Ash, M.A. 5960.
Aski, A. 8870.
Aslam, B. 7869.
Aslam, B.H. 1117.
Aslam Khan, M. 5897.
Aslam, M. 3789.
Asmus, G.L. 1678.
Aso, K. 5128.
Asperger, H. 8709.
Asspinal, G.O. 3383.
Assael, B.M. 6507.
Asselin, A. 7916, 8657.
Astania, L.N. 493.
Astarita, M.G. 9204.
Aster, S.D. 2306.
Aster, M. 5270, 8661.
Aston, W.J. 3401.
Asuncion, M.J.A. 4652.
Asvelov, R.D. 7389.
Atabekov, I.G. 7915.
Atabekov, J.G. 8862.
Atchison, R.W. 8330.
Atherton, F.R. 6587.
Atherton, J.G. 3307.
Atiq, N. 4133.
Atquillah, M. 2358.
Atti, G.I. 6262, 7137, 7167.
Atkins, C.A. 2168.
Atkinson, B. 1684, 4219, 7448.
Atkinson, B.A. 2231.
Atkinson, C.J. 1260.
Atkinson, L.V. 3381, 5619, 5945.
Atkinson, P.H. 6643.
Atkinson, T. 3010.
Atlas, R.M. 4973, 8497.
Atlin, G.N. 1180.
Atlow, S.C. 5846.
Atopke, S.Ya. 3227.
Atr, M. 8556.
Attasapunnna, P. 3610.
Attenu, F. 3094.
Attias, J. 1737.
Attinelli, D. 3719.
Attwill, P.M. 5541, 8937.
Auban, E. G. 557.
Auckenthaler, R. 584.
Auclair, J. 212.
Audibert, F. 6656, 8388, 9219.
Auerman, T.L. 6886.
Auger, F. 6499.
Augsburger, K.C. 1240.
Augustin, H. 1354.
Augustin, J. 6488.
Aulaj, S.S. 4515, 8800.
Aulakh, K.S. 1992.
Aulakh, M.S. 2988.
Auld, B.A. 3888.
Aulicino, F.A. 4128.
Aulicino, T.M. 480.
Auling, G. 951.
Aumen, N.G. 999.
Aurich, H. 4296.
Aurich, P. 3801.
Austin, H.J. 8082.
Austin-Prather, S.L. 5793.
Austin, B. 4937, 6715.
Austin, F.J. 3219.
Austin, R.K. 461.
Austin, S. 3904.
Austin, W.J. 7245.
Ausubel, F.M. 5676, 6366.
Avaeva, S.M. 3434.
Avanzini, G. 8396.
Avelino, C.C. 4338, 8540.
Averdano, A.C. 6208.
Aveni, J.B. 4086.
Avent, R.V. 583.
Avery, G.S. 536.
Averyanov, A.A. 8889.
Averyanova, E.V. 6827.
Averyard, C.S. 2893.
Avigliano, L. 909.
Avila Gonzalez, E. 5361.
Avila, A. 6069.
Axelsen, N.H. 765.
Axelsson, J.P. 3635, 6143.
Axell, R.C. 130, 5235.
Ayalar, F. 1328.
Ayala, J.A. 1526.
Ayaz, M.A. 2158.
Ayer, W.A. 972.
Ayers, J.E. 7971.
Ayers, J.W. 8455, 6527.
Ayres, D.E. 4458, 8184.
Ayotte, C. 5304.
Ayoub, A.T. 3668.
Ayres, P.G. 1130, 2744, 5434, 7957.
Ayvazyan, G.I. 4300.
Azad, A.A. 5852, 8702.
Azad, H.R. 2074.
Azaiz, H. 2073.
Azari, M.R. 5132.
Azcon-Aguilar, C. 3946.
Azcon, R. 3946.
Azene, G. 7400.
Azevedo dos Santos, M. 8468.
Aznar, J. 4811.
Azuma, M. 3639, 6130, 8659.
Ba, A. 872.
Baab, D.A. 7553.
Baas, R.A. 9282.
Baas, R. 2969.
Baath, E. 1205, 2931, 5448, 5643.
Baba, K. 7384, 7481, 8309.
Babai, M. 4766.
Babacuah, K.D. 7993.
Babadost, M. 2793, 7149.
Babaeva, P.V. 1412, 6025.
Babayan, R.S. 3854.
Babcock, D.K. 1137.
Babenko, Yu. 1287.
Babichev, V.V. 923.
Babliuk, L.A. 2430.
Babos, K. 8947.
Babu, J.P. 8275.
Baburin, L.A. 4267, 7669.
Baccanari, D.P. 8579.
Baccay, R.A. 9032.
Bacha, A.N. 6875.
Bachet, B. 1727.
Back, A.E. 711.
Back, W. 4192.
Backes, B.A. 7419.
Bachhaus, G.F. 2811.
Bachkowsky, L.V. 6050.
Backman, P.A. 1220, 1227, 7934, 8790.
Backstrom, B. 7548.
Badstuber, R.E. 502, 705, 706.
Badr, J. 1380, 1645.
Badaue de Almeida Rangel, L. 5909.
Badoen-Jones, J. 2167.
Bader, G.F. 9154.
Bader, J. 1842.
Badie, M.F. 9142.
Badra, G. 4356.
Badsha, N. 1939.
Badyalk, J.A. 468.
Bae, B.H.C. 30.
Baecker, A.A.W. 1246.
Baenziger, P.S. 1197, 8067.
Baer, U. 2237.
Baer, L. 5673.
Baerwolf, D. 4763.
Baesman, R.K. 5908.
Baes, A. 4924.
Baggerman, C. 8342.
Baggett, J.R. 254, 8795.
Baghdadi, N. 4720.
Baghlat, A.O. 873, 1922, 5962.
Bagley, B.C. 4030.
Bagyaraj, D.J. 2145, 2945, 3932, 5641, 7276.
Bahadur, S. 9139.
Baham, J. 4675.
Bahar, S. 863.
Bahk, J. 5377.
Bahl, H. 859.
Bahl, N. 8716.
Bahr, A. 7628.
Baig, S. 3536.
Bajer, B. 4221.
Bailey, F.J. 5018.
Bailey, J.A. 5185, 7142.
Bailey, J.E. 662, 1530, 1572, 3403, 6037, 9295.
Bailey, J.M.G. 9199.
Bailey, J.S. 1049, 1066, 3322, 7009.
Bailey, P.D. 631, 652.
Bailey, R.V. 583.
Bailey, R. 2492.
Bailey, R.B. 3604, 8668.
Bailey, R.E. 185, 7836.
Bailey, T.A. 2893.
Bailey, V.I. 6807.
Baillies, K.W. 7938.
Baillie, A.J. 513, 4849.
Baillbridge, A. 5403, 8058.
Baine, W.B. 4940.
Baines, E.F. 1242.
Bains, S.S. 8117.
Bairamova, A.S. 6440.
Baird-Parker, A.C. 3715.
Baird, L.M. 4506.
Baird, R.M. 9149.
Bajars, J.W. 4817.
Bajaj, B.S. 4817.
Bajpai, P.K. 5298.
Bajon, A.M. 3526.
Bajpai, P. 3640, 5298.
Bakalivanov, D. 3969.
Baker, B.E. 2744, 2754, 3724.
Baker, C.A. 178.
Baker, C.J. 77.
Baker, C.N. 484, 502, 3095.
Baker, D. 4598, 8471, 8499.
Baker, D.C. 5748, 6478.
Baker, E.E. 5805.
Baker, F.L. 3472.
Baker, H. 1417, 3114.
Baker, J.S. 7613.
Baker, K.F. 844, 1188, 4231.
Baker, L. 6747.
Baker, N.F. 6092.
Baker, P.M. 1267, 2897, 8115, 8227, 8228.
Baker, R.C. 1048, 1050, 6982, 7356.
Baker, R.L. 8351.
Baker, S.K. 6175.
Baker, T.G. 8937.
Baker, W.L. 7331.
Bakhurskaya, L.P. 4942.
Baklanov, M.M. 6003.
Bala, S. 7251.
Balasubeshvich, M.I. 115, 952, 4371, 6062, 6063.
Balachandran, N. 2429.
Balakrishnan Nair, N. 8196.
Balakrishnan, N. 7223.
Balandin, I.G. 466.
Balasaraswathi, R. 7051, 7087, 7090.
Balasimtha, D. 7848.
Balasooriya, I. 8818.
Balakrishnan Nair, N. 8196.
Balakrishnan, N. 7223.
Baldwin, J.E. 6519, 6528, 6796, 9195.
Baldwin, K.A. 2196.
Bale, M.J. 6787.
Baleux, B. 9241.
Baleux, C. 486.
Balica, N. 2139.
Baliga, B.A. 6123, 7799.
Baliga, B.R. 6199.
Balkwill, D.L. 5813.
Ball, D.H. 4326.
Ball, P.R. 5666.
Ball, T.S. 2796, 5431, 7973.
Ballabio, M. 2274.
Balles, J. 6778.
Ballinger, M.E. 260.
Ballinger, W.E. 3851.
Ballio, A. 8740, 8809.
Ballou, W. 780.
Balmforth, A.J. 3502.
Baloda, S.B. 1933, 7113.
Balsamo, A. 4823.
Balston, E. 1865.
Balch, A.L. 8801, 9090.
Baltensperger, A.A. 4666, 5661, 7277.
Baltes, W. 5366, 5367.
Baltimore, D. 6614.
Baltashevich, A.K. 2685.
Balzarini, J. 4772.
Bamforth, C.W. 6941.
Bamforth, S.S. 7246.
Ban, S.N. 6950.
Bancroft, K. 6672, 7496.
Bancroft, M.M. 1167.
Bandyopadhyay, K.K. 8514.
Bandyopadhyay, T.K. 4005.
Banerjee, A. 3487.
Banerjee, A.K. 4875, 4881.
Banerjee, D. 8768.
Banerjee, D.K. 14, 7585.
Banerjee, R.K. 6689.
Banerjee, S. 3660.
Banerjee, S.K. 3993.
Banerji, S. 2133.
Banfalvi, G. 1775.
Bang, M. 6366.
Bang, W.-G. 6.
Banhegyi, I.G. 6393.
Banik, S. 2151, 6384.
Baninichak, J.A. 5364.
Banis, R.G. 7722.
Banker, D.D. 1313.
Banker, F.S. 4074, 6646.
Bankowski, R.A. 3244.
Banko, D.J. 5491, 9361.
Bannatne, R.M. 4710, 7323.
Bannister, E.R. 494, 672.
Banno, I. 3410.
Banno, Y. 7111.
Bansal, J. 4865.
Bansal, M.P. 3256.
Bansal, R. 7964.
Bansal, R.D. 8819.
Banshe H., J. 8882.
Bantari, E.E. 8008.
Banwar, G.J. 5088.
Baquero, F. 537.
Bar-Lev, S. 2711.
Barabas, Z. 8098.
Baracho, I.R. 1731.
Barak, E. 8297.
Barak, M. 480.
Barak, K. 1213.
Barak, Z. 2672, 3543.
Baraldi, P.G. 9118.
Baralle, S.B. 2676.
Barani, R. 6090.
Baranov, E.P. 6066.
Baranwal, V.K. 8140.
Barash, I. 1954.
Baratova, L.A. 2766.
Baratti, J. 148, 856, 929, 996, 1782, 2614.
Baratti, J.C. 6929.
Barbe, M. 2016.
Barbara, D.J. 3968.
Barbatschi, F. 3154.
Barber, D.L. 3615.
Barberis, R. 4099.
Barbetti, M.J. 6233, 6237.
Barbi, M. 6742.
Barbour, E.C. 1326, 7415.
Barc, M.G. 8279.
Barc, M.C. 4141.
Bardone, R.M. 9213.
Bardshiri, E. 7785.
Bardley, W.G. 2624.
Bardke, D. 9239.
Bare, J.N. 1257, 3946.
Barefoot, S.F. 9203.
Barenboim, G.M. 6066.
Barenkamp, S.J. 3412.
Barfield, C.S. 5212.
Barfield, H.C. 47.
Barford, J.P. 1861.
Bari, M.A. 5216.
Barigazzi, G. 6461.
Barin, F. 6607.
Barinsky, I.F. 1292.
Baris, M. 6180.
Baritelle, J.L. 1167.
Barja, J.L. 9072.
Barkai-Golan, R. 2011, 2822, 62.
Barker, G.F. 1558.
Barker, K.R. 5455.
Barker, S. 187.
Barkley, W.E. 1522.
Barksdale, T.H. 2851, 5508.
Barlam, T. 4878.
Barlett, C.I.R. 3215.
Barlow, C.G. 7575.
Barmore, C.R. 1219, 7196.
Barndard, E.L. 6324.
Barne, A. 1157.
Barnes, C.L. 8521, 8755.

- Barnes, D.K. 2979.
Barnes, E.M., Jr. 4195.
Barnes, G.L. 4186.
Barnes, L.W. 1155.
Barnes, W.G. 8498.
Barneto, R. 3693.
Barnett, B.B. 9253.
Barnett, L. 627.
Barnett, O.W. 4151, 6229, 7927, 8445, 8777.
Barnett, R.D. 7982.
Barnhart, C.L.H. 1535.
Barnhart, M. 4870.
Barnum, D.A. 4895.
Baron, E.J. 7408.
Baron, J.L. 5744.
Baron, S. 5744.
Baroudy, B.M. 6645.
Barr, A. 1610.
Barraqueta-Egea, P. 3877.
Barrat, J.G. 3813, 7986.
Barratt, J. 1504.
Barraut, G. 9141.
Barre-Sinoussi, F. 5983.
Barrentine, W.L. 2064.
Barreto-Bergler, E. 2632.
Barrett, A.D.T. 8459.
Barrett, D.K. 4621.
Barrett, E.L. 2643, 5972.
Barrett, J.A. 2861.
Barrett, J.E. 2631.
Barrett, S.C.H. 3892.
Barrett, T.J. 6837, 589.
Barridge, B.D. 3127.
Barriga Angulo, G. 429.
Barrigo Angulo, G. 9080.
Barrion, M. 5634.
Barrios, S.R.A. 4632.
Barro, J. 4649.
Barros, E.G. 1740.
Barroso, J. 380.
Barrows-Broadus, J. 2918, 5599.
Barrucand, L. 4336, 8540.
Barry, A.L. 483, 487, 502, 503.
Barry, C. 4349.
1380, 1392, 1645, 2238, 2259, 2262, 3073, 3105, 4819, 4834, 4835, 4865, 5774, 6421, 6455, 6511, 6527, 7330, 7439.
Barry, D.W. 2231.
Barry, M. 6863.
Barry, R.D. 5887.
Barry, S. 1697.
Barta, M. 7670.
Barta, V. 5001.
Barteling, S.J. 5809.
Bartels, J. 4049.
Bartha, R. 4686, 8285, 8403, 8688.
Barthelemy, M. 4275.
Bartholomew, W.R. 4180.
Barthomeuf, C. 5222.
Bartlett, C.L.F. 4933.
Bartlett, J.G. 230, 6216.
Bartlett, J.R. 5069.
Bartlett, R.C. 3313, 4006, 4788.
Bartlett, R.J. 9027.
Bartley, J. 22.
Bartmann, K. 5754.
Bartnicki-Garcia, S. 3435.
Bartolomeo, A. de 5855.
Bartolucci, A. 9160.
Barton, R.J. 2017.
Bartoshevich, Yu.E. 4288, 7469.
Bartsch, G. 4757.
Bartus, H.F. 701.
Bartzokas, C.A. 4011.
Baruah, J.N. 5521, 7705.
Baruah, K.K. 7019.
Basak, M.K. 7792.
Basarova, G. 5101.
Basargang, W. 7453.
Bascomb, S. 2484.
Baselski, V. 3283.
Baselski, V.S. 748, 1655, 3350.
Bashan, Y. 5482, 8037.
Bashi, E. 321.
Basker, M.J. 1335.
Baskerville, A.J. 5912.
Baskunov, B.P. 1008, 4440, 6152, 9024.
Basky, Z. 4585, 7949.
Basnakian, I.A. 8549.
Basnayian, I.A. 9223.
Basra, R.K. 7955.
Bassalik-Chabielka, L. 5773.
Bassarab, S. 6363.
Bassett, E.N. 5593.
Basset, C.M. 9090.
Bastin, C.N. 2396.
Bastawde, K.B. 919.
Bastien, J. 5739.
Bastin, G. 6705, 8394.
Bastow, K.F. 9125.
Basu, B. 6424.
Basu, M. 8768.
Basu, P.K. 3799.
Basu, S.K. 4833.
Bata, A. 7077, 7096.
Batal, I.Jr. 7316.
Bateman, B.W. 4943.
Bates, R.C. 475, 6484.
Bates, R.E. 1456.
Batish, V.K. 7106, 7893.
Batla, K.A. 4779.
Batra, L.R. 6192.
Batt, C. 3747.
Batt, C.A. 3419.
Battaglia, M. 4986.
Battaglioli, G.J. 3300.
Batterby, S. 6235.
Battistini, S. 534.
Battut, J. 4660.
Baudre, R. 1901.
Bauer, J. 2761, 7095.
Bauer, W.D. 2166, 5899, 8248.
Baum, C.A. 1651.
Baumann, G. 8904.
Baumann, R.J. 1389.
Baumer, J.S. 3849.
Baumgaertner, M. 7428.
Baumgart, J. 6988.
Baumgarten, A. 162.
Baumgartner, A. 4873.
Baumst, M.T. 1456.
Bauza, M.T. 8433.
Bavoso, A. 3140.
Bawden, A.D. 7288.
Bawden, R.E. 9177, 9185.
Baxi, K.K. 4810.
Baxter, L.W., Jr. 1140.
Baxter, R.L. 5777.
Bayer, A.M. 4961.
Bayardelle, P. 5040.
Bayer, A.S. 4814, 5513, 7413, 7423.
Bayer, E.A. 5162.
Baylet, R. 5868.
Bayliss, G.J. 647.
Bayly, R.C. 4422, 8279.
Bayne, H.G. 2315, 8238.
Bayne, S. 706, 1329, 1379.
Baynes, N.C. 3131.
Bayoumi, B.E. 1321, 9131.
Bayston, R. 2486.
Bazhanov, V.S. 3128.
Bazylinski, D.A. 3968.
Bazzi, C. 533, 7161.
Beacham, L.M. III 902.
Beachey, E.H. 9219.
Beale, J. 5745.
Beaman, J. 2767.
Bean, P.G. 4193, 5056.
Beardmore, J. 2059.
Beasley, J.N. 2749.
Beatty, B.J. 596, 609, 3237.
Beatz, S.J. 8996.
Beaucage, C.M. 2519.
Beauchamp, C. 7131.
Beaufort, F. 7472.
Beaulieu, B.B., Jr. 2312.
Beaulieu, C. 7131.
Beaumont, F. 2533.
Beavis, W.D. 6515.
Beccari, M. 1484.
Becker, D. 4757.
Beck, G. 233.
Beck, R.W. 8858, 9297.
Becke, J.W. 1868.
Becker-Boost, E. 5031.
Becker, A. 8482.
Becker, A.M. 1444.
Becker, D.K. 5299.
Becker, J.-U. 896, 933.
Becker, J.M. 458, 8311.
Becker, P. 7230.
Beckers, H.J. 8183.
Beckingham, J.H. 8150.
Beckjord, P.R. 3941, 8935.
Beckler, G.S. 3997.
Beckwith, A.L.J. 6529.
Beddows, C.L. 5349.
Bedeschi, A. 534.
Bedford, W.K. 2373.
Bedi, P.S. 8799, 8801.
Bedker, P.J. 3915.
Bedmar, E.J. 4649, 6372.
Bednarski, W. 6792, 7508.
Bedows, E. 6474.
Beebe, J.L. 8463.
Beebe, R.A. 8729.
Beehler, G.R. 8400.
Beek, M.A. 2878.
Been, C. 4644.
Beer, K. 6722.
Beer, S.V. 2803.
Beers, H. 1901.
Beesley, J.E. 7624.
Beg, S.A. 2358.
Beggs, W.H. 1406, 4754.
Begtrup, M. 2263.
Begum, A. 5359.
Behal, V. 4860.
Behanmou, N. 2778.
Behan, K.A. 699.
Behner, N. 395.
Behne, L.A. 2757, 5931.
Behncken, G.M. 3771, 3800, 4502, 5404.
Behue, M. 2052.
Beier, R.C. 1936.
Beight, D.W. 4740.
Beiles, A. 7209.
Beinke, W.F. 3918.
Beining, K. 1042.
Beintema, J.J. 939.
Beit Smith, M. 7996.
Beisel, M. 4527.
Beit, E.M. 7419.
Bejiga, G. 3790.
Bekemans, J. 6537.
Beker, M.E. 1047.
Beker, M.J. 8407.
Bektimov, T.A. 7562.
Belaich, J. 3666.
Belaich, J.-P. 1045.
Belardini, M. 2825.
Belda, W. 3340.
Beldet, M. 5865.
Belding, D.E. 4772, 5747.
Belford, R.L. 1413.
Belikov, V.M. 1536, 4289, 6736.
Bell, D.J. 3426.
Bell, D.K. 1111, 1848.
Bell, D.R. 2727, 2728.
Bell, T.I.W. 3922.
Bellamy, W.D. 5320.
Bellando, M. 8745.
Belleau, B. 3117.
Belligardi, K.H. 6121.
Bellier, A.S. 4814, 5513, 7413, 7423.
Bello, H. 4337.
Bellows, P. 8646.
Bellus, D. 3756.
Belioian, A. 3604, 8668.
Belov, A.P. 5241.
Belov, I.S. 5268.
Belova, M.M. 5931.
Belova, T.N. 3992.
Belser, N.O. 6159.
Belsh, R.B. 605.
Beltrame, P. 6674.
Beltrami, P.L. 6574.
Beltramini, M. 5173.
Beltran, J.M. 537.
Beltran, S.D. 1785.
Belyaeva, E.V. 6608.
Belyanina, V.F. 4044.
Belyankova, L.A. 1889.
Belzer, O. 7477.
Ben-Yephet, Y. 1209.
Benatti, G. 7875.
Benavente, J. 5749.
Benavente, J. 394, 4336, 8540.
Bencanti, Z. 8742.
Bencini, D.A. 2888.
Bencivengo, M.M. 7913.
Bendicksen, G. 7297.
Benda, R. 7568.
Bendall, M.R. 8531.
Bender, C.G. 5456, 8075.
Bender, C.L. 2807.
Bender, G.L. 2977.
Bender, H. 6753.
Bendikene, V.G. 7689.
Bendiscio, L. 6508.
Bendjelloul, D. 9261.
Benedek, A. 7498.
Benedetti, E. 3140.
Benefield, L. 544, 4105.
Benefield, L.E. 1485.
Benes, S. 790.
Boney, E. 7444.
Bongton, S. 7113.
Benjamin, M.M. 6669.
Benko, G. 4743.
Benner, R. 177, 1026, 1455, 2704, 5305, 6171, 7882.
Bennett, R.E. 809.
Bennett, M. 2391.
Bennett, R.D. 5338.
Bennett, R.W. 5381.
Bennetto, H.P. 5242, 5243, 6099, 6101.
Benson, C.P. 934.
Benson, R.F. 3301, 5039.
Benson, W.R. 2267.
Bent, J.M. 2475.
Bentley, P.H. 4867, 7433.
Bentz, H. 5354.
Bepko, T. 1823, 2246, 2255.
Bera, A.K. 3864.
Beraha, L. 7128, 8031.
Berborodov, A.M. 6852.
Berch, S.M. 8166.
Bercovier, H. 9327.
Berck, J.D. 1134.
Berenbaum, M.C. 3091.
Berendse, F. 8146.
Berenger, J.-F. 1738.
Beresov, T.T. 6846.
Berestetsky, O.A. 1278.
Berezin, I.V. 5077, 5877, 7656.
Berg, D. 8314.
Berg, G. 2393.
Berg, G.H. 1193.
Berg, H. 956.
Berg, H.G. 3116.
Berg, R.H. 4604.
Bergan, T. 4839, 4843, 7365, 7366, 7595.
Bergdahl, D.R. 3916.
Bergdahl, M.S. 8751.
Berger, R.D. 237.
Berger, R.G. 133.
Berger, S.A. 2222, 2278, 2538, 3223.
Bergeron, R.J. 448, 8335.
Bergersen, F.J. 2610, 2959.
Berghash, S.R. 430.
Bergman, J.W. 1144, 1145.
Bergman, K. 378, 6380.
Bergmann, H. 2978, 4668.
Bergogne-Berezin, E. 5768.
Bergquist, R.R. 5423.
Bergstrom, D.E. 4772, 5747.
Bergstrom, G.C. 6776.
Bergstrom, S.L. 5236.
Berlinger, J.E. 4659.
Berk, D. 2757, 5931.
Berkeley, R.C. W. 9317.
Berkeley, R.C.W. 1036, 5052.
Berkelman, R.L. 452, 6723, 7539.
Berlin, B.S. 9221.
Berliner, D. 2209.
Bernard, D. 1500, 8324.
Bernard, M. 1568.
Bernard, P.W. 6591, 6616.
Bernas, S. 499.
Bernarm, R. 4296.
Bernard, A. 3604, 8668.
Bernard, R.L. 1202.
Bernard, S. 5268.
Berni, M. 6078.
Bernhardt, F.-H. 5176.
Bernier, C.C. 1198, 2862, 3873.
Berni, R. 7611.
Bernie, A.M.M. 346.
Bernier, P. 5383.
Berry, A.M. 4599.
Berry, D.R. 176.
Berry, J.W. 5522.
Berry, L.R. 2573.
Berry, R.K. 5184.
Berry, R.W. 3839.
Bersani, G. 5418.
Bershtein, E.M. 4857, 9155.
Bershtein, I.Y. 4857.
Berfa, G. 5560.
Berthelin, J. 394, 8210.
Berthelo, P. 4720.
Berti, M. 6571.
Bertini, D. 7600.
Bertino, S.J. 5767.
Bertolasi, V. 9118.
Bertoldini, G. 9189, 9311.
Bertram, M.A. 7429, 7442.
Bertrand, A. 4410, 6122.
Bertrand, D. 1715.
Bertrand, F. 3342.
Bertrand, J. 6701.
Bertrand, J.C. 1893.
Bertrand, P.F. 5446.
Berwick, P. 4437.
Berzins, K. 633.
Beschkov, V. 3473.
Besri, M. 2847, 8038.
Bessieres, P. 7708, 7709.
Besson, F. 4886.
Best, D.J. 422.
Best, M. 7528.
Bestfeli, G. 4425.
Beth, E. 599.
Bethia, R. 5384.
Bethell, R.S. 7997.
Bethlenfalvay, G.J. 2135, 8222, 8238.
Bethua, V. 1691.
Bethu, E. 3059.
Beths, M.P. 7624.
Beths, R.F. 4160.
Beuchat, L.R. 1926, 3064, 5325, 6207, 8318.
Beute, M.K. 242, 1171, 5490, 6239, 7134, 7942, 8084, 8105, 8772.
Beutin, L. 4179, 5020.
Beutler, T. 1838.
Bevercombe, G.P. 8190.
Beveridge, E.C. 5148.
Beveridge, T.J. 3615, 9037.
Bevil, R. 4000.
Bewley, R.J.F. 2939, 2940, 5613.
Bey, R.F. 4893.
Bey, I. 8038.
Beyeler, W. 802, 8501.
Beyer, R. 4366.
Bezbanuah, B. 4671.
Bezborodov, M. 917, 4320.
4342, 4346, 5991, 6855, 6857, 6875, 7725, 7744.
Bezzubov, A.A. 4405, 4417, 7813.
Bhadra, A. 3979.
Bhadri, P.N. 4669, 9015.
Bhadri, S. 1583.
Bhadri, S.K. 7792.
Bhagiriathi, B. 7037.
Bhandari, B. 8995.
Bhandari, S.C. 4662.
Bharathan, R. 6235, 8769.
Bharati, A.K. 3963.
Bhargava, K.S. 8333.
Bhargava, S. 6625.
Bhargava, S.N. 3943.
Bhaskar, R.S. 4524.
Bhaskara Rao, P. 5756.
Bhat, K.K.S. 594.
Bhat, N.T. 7848.
Bhat, R.V. 7891, 8725.
Bhat, T.N. 2621.
Bhat, S.C. 7093.
Bhatnagar, L.G. 1978.
Bhatnagar, P.K. 6612.
Bhatt, B.N. 6218.
Bhattacharjee, J.K. 7690.
Bhattacharya, A.K. 6067.
Bhattacharya, L.S. 1303.
Bhattacharya, S.R. 6424.
Bhattacharya, A. 3037.
Bhattacharya, F.K. 3341.
Bhattacharya, H. 6326, 6327.
Bhattacharya, P. 2936, 6384.
Bhattacharya, P.K. 5196.
Bhattacharya, S.K. 1214.
Bhide, V.P. 6871.
Bhikhabhai, R. 3509, 8867.
Bhomb, B.S. 8026.
Bhul, R.S. 3792.
Bhumiratana, A. 2658.
Bhuvaneswari, T.V. 2970.
Biamon, E.J. 560.
Bianchi, A. 499.
Bianchi, P. 6412.
Bianchi, M. 2121, 6682.
Bianco, P. 5108.
Bibb, M.J. 4845.
Bibby, L.F. 3215.
Bibikova, M.V. 3082.
Bici, M. 5508.
Biddle, J.W. 718.
Biederbeck, V.O. 8960.
Biella, G. 4663.
Biely, P. 3671.
Biermann, B. 2153, 2943.
Bierman, G.F. 2944.
Bieth, G. 3025.
Biffi, M.R. 203.
Bigelow, J. 2238.
Bihari, V. 8581.
Bijker, W. 308.
Bijl, R. 7055.
Bijlga, G. 4894.
Biketov, S.F. 2589.
Bikunova, A.N. 4396.
Bilai, T.I. 860.
Bilal, V.I. 1076.
Bill, E. 5176.
Bill, J. 814.
Billings, E. 7166.
Bills, S. 4568.
Bilodeau, D. 5192.
Bilton, R.F. 876, 4427, 6154.
Binder, P.S. 5869.
Bindschedler, O. 6183.
Binns, M.M. 6637.
Binot, R. 5697.
Binstock, D.A. 8938.
Birch, P.G. 253.
Bir, A.F. 6215.
Birjuzova, V.I. 6882.
Birkenmeyer, R.D. 6543.
Birkness, A. 1934, 6781, 7414.
Birkman, D. 8580, 8582.
Birmann, H.C. 741.
Biro, A.-M. 6361.
Biryukov, V.V. 1411, 6133.
Bisagni, E. 4742.
Bisaria, R. 90, 2697.
Bisaria, V.S. 1726.
Bischofsberger, W. 2382.
Bissessar, S. 4554.
Bishop, K. 1943, 1944.
Bishop, P.E. 2989.
Bissling, R.F. 4166.
Bissling, T. 2981, 4644.
Bistline, R.G., Jr. 4748.
Bistoch, G.A. 9136.
Biswal, N. 6835.

- Bieswas, A. 6582.
Bisaz-Konarzewska, A. 9236.
Bitt, S.V. 6733.
Bitter, G.A. 6608, 7775.
Bitterlin, M.W. 7994.
Bittle, J.L. 6614, 6659.
Bittner, J. 2489.
Bittner, M. 4804.
Bliton, G. 2331, 4927, 5628.
Blizyukova, L.B. 2140.
Blider-Forell, E. 5075.
Bliss, M.J. 7119.
Bljuman, J. 5934.
Black, C.H. 2913.
Black, M.C. 4271.
Black, M.C. 1171, 5490, 7942, 8084, 8105, 8772.
Black, R.E. 2325, 2326, 6717.
Blackburn, P.J. 3281.
Blackburn, T.H. 8240.
Blacklock, Z.M. 578.
Blagoveshchensky, V.A. 2557.
Blafy, O.M. 1557.
Blair, H.C. 2243.
Blake, P.A. 663.
Blakeman, J.P. 5408, 7135, 8484, 8936.
Blakeman, R.P. 3968.
Blanc, P.L. 7444.
Blancas, A. 3415.
Blanch, H.W. 668, 864, 1532, 1696, 3474, 5206, 8541, 8660.
Blanchard, D.K. 6839.
Blanchard, R.O. 8188.
Blanchard, T.L. 2253.
Blanchette, R.A. 2890, 3674, 3915, 3917, 7240.
Blanco-Lopez, M.A. 1142.
Blanco, J.J. 6224.
Blancou, J. 2219.
Blanch, C.E. 2853.
Blaney, B.J. 1074.
Blaney, J.M. 4323.
Blank, H.F. 1574.
Blank, T. 3513.
Blankson, M. 2266.
Blanchek, H.P. 3593.
Blaser, M.J. 1650, 3226, 3309, 5859, 7414, 9167.
Blaskovic, P. 4955.
Blaszczak, M. 660, 9236.
Blazevic, D.J. 737.
Blaskey, R.A. 5844.
Bledsoe, C.S. 5574.
Blendon, D.C. 7369.
Blewitt, M.K. 5388.
Blivins, L.P. 6466, 6491.
Blobel, G. 4276.
Blocher, J.C. 7026.
Block, J.C. 1495, 9041.
Block, S.S. 1291, 1515, 1520, 1695.
Bloemraad, M. 6743.
Blois de Assis, A.C.F.C. 5909.
Blok-Parkowska, D. 3120.
Blom, J.C. 2649.
Blokina, I.N. 3992, 5953.
Blom, E. 5023.
Blom, J. 4594.
Blomquist, G.K. 8489.
Blondin, B. 6955.
Blonska-Pawlak, A. 5486.
Bloom, J. 7259.
Bloomfield, S.F. 7575.
Bloquel, R. 1806.
Blont, J.P. 3245.
Blont, H.E. 5622.
Blont, J.F. 1442.
Blont, D.M. 2621, 8573.
Blowers, C.L. 7360.
Blum, L. 5273.
Blum, D. 7529.
Blum, H.E. 8612.
Blumauerova, M. 4674, 4737.
Blumer, J. 5725.
Blumer, S.O. 4228.
Blumen, T.J. 5942.
Blunden, E.A.G. 2987.
Blutsh, H. 886.
Bo, G. 6405.
Boa, J.M. 6055.
Board, R.G. 3368, 4010, 4240.
Boardman, G.D. 475, 6484.
Bobby, D. 7342.
Bobbler, G. 7815.
Bobbler, H. 8642.
Boccu, E. 73.
Bocharov, A.L. 5152.
Bocharov, B. 1029.
Bochuk, I.A. 9325.
Bock, K.R. 1965.
Bockmuehl, J. 6971.
Bocker, H. 4872, 8572.
Bockus, W.W. 5474, 7259, 7974.
Boddy, L. 352, 7218.
Bode, L. 4179, 5020.
Bode, R. 1800, 8580, 8582.
Bodey, G.P. 2523, 6505, 9091.
Bodie, E.A. 8474.
Bodine, A.B. 2745.
Bodo, B. 1414, 1727.
Bodonak, N.C. 5707.
Boddy, B.A. 754.
Boedjelt, F.W. 4450.
Boeck, A. 2237.
Boehm, C.C. 4758.
Boekeloo, M.K. 9154.
Boer, E. 7724.
Boelens, R. 7665.
Boening, B. 2593.
Boerma, R.H. 1172.
Boesman-Finkelstein, M. 34.
Boesch, U. 6653.
Bogacheva, T.I. 6827.
Bogachur, E.R. 9240.
Bogatov, L.G. 2281.
Bogdan, S. 6537.
Bogdanov, K.M. 822, 6790.
Bogdanov, M.V. 4528.
Bogner, I.L. 2344.
Bognar, R. 3152.
Boguslawski, G. 6850.
Bohloul, B.B. 408, 2133, 2967, 7267, 8997.
Bois, P.A. 2439.
Bohn, W. 471.
Boiardi, R.L. 5058.
Boiron, J.N. 1870.
Bois, J.M. 6779.
Boistard, P. 4660.
Boisau, G. 8336.
Bokov, S.V. 7915.
Bok, S.H. 5167, 5810.
Bokadia, M.M. 4782.
Bokel, M. 3139.
Bok, T. 5697.
Bolan, N.S. 2144.
Boland, M.J. 2971.
Bogliano, N.C. 3947.
Boling, J.A. 7979.
Bolviv, R. 6505.
Bolla, G. 3102.
Bollan, J.C. 1258, 8587, 8644.
Bollich, P.K. 7140.
Bolobova, A.V. 5166.
Bolton, A.T. 8916.
Bolton, J.F. 2473, 3305, 4210, 5035, 8429.
Boman, H.G. 4732.
Bomar, M.T. 6177, 7302.
Bommeli, W. 1452.
Bonadonna-Aparo, L. 5846.
Bonam, D. 6860.
Bond, P.J. 1601.
Bond, W.W. 472, 7539.
Bondarchuk, A.A. 4337, 7732.
Bonde, G. 541.
Bondorenko, V.M. 4080.
Bone, D.H. 1155.
Bonk-Parkowska, D. 3120.
Bonne, V. 2925.
Boney, C. 458.
Bonfante-Fasolo, P. 4622, 5560.
Bonifis, M. 5668.
Bonigaerts, G.P.A. 3028.
Bonin, A. 4939.
Bonin, P. 5047, 7345.
Bonis, A.F. 1257.
Bonish, P.M. 2950.
Bonn, G. 7815.
Bonn, W.G. 6310.
Bonner, D.P. 6583, 9063.
Bonnet, J. 5904.
Bono, J.J. 5309.
Bonora, G.M. 3140.
Bontoux, J. 5826.
Boon, R.J. 1335.
Boone, D.M. 8041.
Boone, D.R. 6398.
Boone, E.J. 5003.
Boone, T. 6661.
Boote, K.J. 237.
Booth, A. 1712.
Booth, B.A. 34.
Booth, C. 7950.
Booth, J.C. 2438.
Booth, J.E. 6010.
Booth, S.J. 5793.
Bopaiab, B.M. 5646, 7848.
Bopari, K.S. 5779.
Bopp, C.A. 1589.
Bouquien, C.J. 1716.
Boraker, D.K. 1621.
Borall, R. 7762.
Borchert, A. 8553.
Borda, J. 3152.
Bordaleau, L.M. 3962, 8234.
Bordet, J. 5867.
Bordner, R.H. 4945.
Borell, C.W. 7690.
Borges, A.C. 5818.
Borges, O. 5502.
Borgh, A. 8384.
Borglum, G.B. 6636.
Borisnok, V.S. 5965.
Borisova, V.N. 2309, 4060.
Borkar, P.S. 3512, 4984.
Borman, E.A. 4357.
Bormann, E.J. 6572, 7470.
Bormann, F.H. 5536.
Boro, B.R. 5758, 7410.
Borolio, V.M. 4733.
Borroni, A.M. 1008, 2208, 4683, 7351.
Borovikova, V.P. 2584.
Borowski, E. 1429, 2303, 6475, 8382.
Borrego, J.J. 1499.
Borso, G.S. 3487.
Borthwick, A.C. 7712.
Borup-Grochtmann, I. 1423.
Borzan, W. 2530, 2676, 8289.
Bos, L. 2043, 3764, 6314.
Bos, T.J. 6598.
Bossatta, E. 8146.
Bossch, O. P. 4818.
Bose, A. 5301.
Bose, A.K. 7406.
Bose, E.A. 1139.
Boshard, R. 166.
Bosley, G.S. 3299.
Bosman, J. 2338.
Bossart, J.M. 4909.
Bossert, I. 4686, 8285, 8403.
Bossard, E. 3991.
Bostedor, R. 1349.
Bostick, R. 1139.
Bostmembrun-Durand, M. 1881.
Botava, R.M. 1139.
Botava, R. 899.
Both-Patoir, H.C. 3302.
Both, G.W. 6643.
Bothast, R.H. 3497, 3645, 6156.
Bothwick, A.C. 7715.
Botnaric, I. 462.
Botsford, J.L. 2170.
Botstein, D. 6788.
Bott, T.R. 2382.
Botta, G. 3102.
Botticelli, A. 7083, 8746, 8747, 8824, 8848.
Bottazzi, V. 2202, 5329.
Bottomley, P.J. 405, 999, 4184.
Bottone, E.J. 522.
Bottone, E.J. 528.
Botvinko, I.V. 8615.
Botzenhart, K. 6718.
Bouchette, M. 7029.
Boucias, D.G. 3249, 5212.
Boudarel, M.J. 967.
Boudet, A.M. 5309.
Boudreau, A. 6650.
Bouges-Bocquet, B. 6644.
Boughton, B.J. 2411.
Boughton, T.J. 2091.
Boughton, W.H. 1643.
Boudard, L. 636.
Boukens, I.W. 296.
Boulanger, Y. 907.
Boulding, S. 8360.
Bounias, M. 2844.
Bouquet, A. 2555, 3832.
Bourbigot, M.M. 8416.
Bourdais, J. 2213.
Bourdon, D. 1917.
Bourgeois, G. 855.
Bourgeois, C.M. 1900.
Bourgeois, H.M. 8634.
Bourguin, C. 6089.
Bourquet, R. 7375, 7976.
Bourke, E.J. 940.
Bourliou, P. 4141.
Bourne, J.R. 6703.
Bourne, N. 943.
Bourquin, A.W. 3681.
Boursnell, M.E. G. 6637.
Boutin, B.K. 3272.
Boutwell, M.E. 6444.
Bouwer, E.J. 8690.
Bouwman, J.J. 4997.
Bouzos, J. 1808.
Bovara, R. 5131, 6090.
Bovard, K.P. 1053.
Boves, J.P. 3614, 6137.
Bowden, C.P. 7655.
Bowden, R.L. 1135.
Bowdler, T.M. 3874.
Bowen, E.T.W. 5004.
Bowen, G.D. 7221.
Bowen, G.S. 2494.
Bowen, W.H. 6725.
Bower, L.A. 5528, 5533, 7383.
Bowers, R.C. 3896.
Bowers, R.J. 5778.
Bowie, J.U. 5203.
Bowien, B. 6840.
Bowra, B. 8991.
Bowlitt, D.D. 3087.
Bowman, E.V. 5317.
Box, S.J. 1335, 3135.
Boxall, E.H. 2441.
Boxus, P. 5397.
Boyd, J.M. 7346.
Boyd, D.B. 5765, 7462.
Boyd, R.L. 4968.
Boyd, S.A. 2703.
Boyd, W.S. 252.
Boyer, J.M. 5763.
Boyles, D.T. 3985, 4682.
Bozdoglu, F. 4283, 5146.
Bozzola, J.J. 9108.
Braaksma, A. 2608.
Braciale, T.J. 4190, 6636.
Braciale, V. 4190.
Bradbury, T.M. 2449.
Bradford, D.L. 5421.
Bradnock, G. 832.
Bradshaw, N.J. 5452.
Bradshaw, R.E. 4047.
Braeden, C.I. 7666.
Braenden, C.I. 6001.
Braenstroem, G. 460.
Braeutgam, E. 8135.
Brahma, A. 3040.
Brace, M. 6508.
Brain, P. 4387.
Brake, B.J. 792, 2512.
Brake, S. 485.
Bramato, C. 6526.
Brame, C. 2080.
Brane, A.F. 3097, 6522.
Branca, G. 6501.
Brand, C.M. 6636.
Brander, E. 7353.
Brandl, G. 203.
Brandis, H. 1418, 2501.
Brand, M.C. 8789, 8793.
Brandt, W.H. 7204.
Brandts, J.F. 16.
Brankiewicz, A.J. 2639.
Brant, G. 1790.
Branner-Joergensen, S. 79.
Brannquino, M.R. 1945.
Brar, H.S. 3792.
Brasa, S. 6721.
Brasler, C.M. 8192.
Brasler, O.G. 7426.
Brassy, C. 1727.
Brattessani, A.J. 4772.
Brauer, M.A. 1918.
Brault, J. 9327.
Braun, K. 6172.
Braun, S. 4818.
Braun, V. 3129, 7456.
Braunstein, I. 762.
Braun, H.E. 5659.
Bravova, G.B. 4348, 7737.
Bray, D.R. 4959.
Brayton, P. 6711.
Brayton, P.R. 1622.
Brazhnikova, M.G. 3128.
Brecht, J. 146.
Brecht, C. 6607.
Breedlove, R.L. 454.
Breer, C. 2366.
Breeze, A.S. 3029, 8294, 9065.
Breitschuh, G. 2339.
Brekelsmans, A.M. 3534.
Bremer, K. 6268.
Brenner, J.M. 6356.
Brenner, D. 4443.
Brennan, C.A. 621.
Brennan, P.J. 689, 5895.
Brenner, M. 6724.
Brenner, S. 627.
Brennman, G.R. 1470.
Breuer, H. 6583.
Breure, A.M. 6681.
Brewbaker, J.L. 1189.
Brewer, A. 1920.
Brewer, J.M. 3485.
Brewer, R.A. 5063.
Brewin, N.J. 4649, 9008.
Breyer-Menke, C.J. 2338.
Brezenski, F.T. 2390.
Briegleb, I. 144.
Brick, C. 8697.
Brickner, S.K. 8418, 9319.
Bridge, P.D. 7687.
Bridge, J.C. 8434.
Bridges, C.H. 7896.
Bridle, T.R. 2373.
Brienza, A. 6507.
Brigdi, P. 4043.
Briggs, D.J. 5074.
Briggs, S.P. 7902.
Bright, E. 4129.
Bright, G.M. 3123.
Brinkenstein, V.Kh. 6066.
Brill, W.J. 5651.
Brillout, J.-M. 7751.
Brinkman, F. 1028.
Brinkerhoff, L.A. 2832.
Brinton, C.C., Jr. 538.
Briquet, I. 6473.
Brisbane, P. G. 3778.
Brissuel, C. 2499.
Britton, L.N. 8276.
Britton, R.A. 2747.
Britton, V.J. 5918.
Britz, T.J. 3197.
Brk, T.S. 518.
Briansky, R.H. 280.
Broad, D.F. 6048.
Broadbent, A. 7317.
Broadwell, A.H. 7553.
Broccoli, G. 4843.
Broccoli, R. 6721.
Brochier, B. 6476.
Brock-Utne, J.G. 1939.
Brockett, B.E. 1456.
Brocklehurst, T.F. 7847.
Brockmann, U.H. 1611.
Broda, E. 2171.
Broda, P. 2725, 6943, 7820.
Broden, B.E. 1638.
Brodie, B.B. 5224.
Broeker, M. 6611.
Broemsen, S.J. 7219.
Broden, R.N. 536.
Broddon, C. 8432.
Brokopp, C.D. 566.
Broomfield, K.R. 7940.
Brook, J. 8957.
Bronstein, V.L. 1550.
Brook, I. 3118, 4951, 5775.
Brookes, P.C. 6348, 8255.
Brookman, D.H. 2434.
Brooks, J.L. 7494.
Brooks, P.D. 8245.
Broome, C.V. 3214, 4196.
Broome, M.C. 8789, 8793.
Broquist, H.R. 8278.
Bronson, J.E. 3088.
Brough, E.J. 3069.
Broughton, J.A. 2515.
Broughton, W.J. 2966, 5094.
Browder, L.E. 3957, 5417.
Brown, S. 3392.
Brown, A. 598.
Brown, A.G. 1335, 3098, 3135, 3190, A.G.P. 7926.
Brown, C. 5391.
Brown, C.M. 4643.
Brown, D.B. 6648.
Brown, D.E. 7635.
Brown, D.J.F. 6217, 6272.
Brown, E.A. 3900.
Brown, F. 6659.
Brown, F.V. 3164.
Brown, G. 1219, 5470, 7198.
Brown, G.H. 704.
Brown, G.J. 7520.
Brown, I. 3650.
Brown, J.A., Jr. 2380.
Brown, J.F. 293, 4223, 5449.
Brown, J.K. 1965, 8814.
Brown, K.L. 596, 3237.
Brown, K.W., Jr. 4919.
Brown, L.R. 2279, 5257, 6730, 6731.
Brown, M.C. 5721.
Brown, M.E. 6375.
Brown, M.F. 834.
Brown, M.H. 1689, 3715, 4241.
Brown, R.D., Jr. 3688.
Brown, S.E. 5676.
Brown, S.L. 699.
Brown, S.W. 6127, 7802.
Brown, T.D. 6637.
Brown, T.H. 4800.
Brown, W.D. 7885.
Brown, W.E. 9221.
Brown, W.H. 2743.
Brown, C. 1036.
Brown, K.J. 6608.
Brown, L.M. 972.
Browne, H.H. 5274.
Brownlee, A.G. 5933.
Brownlee, C. 5573.
Brownlee, S.G. 3677.
Broughton, P. 9265.
Bruce, A.D. 1243, 7245.
Bruce, A.M. 2542.
Bruce, R.J. 297.
Bruch, M.K. 1525.
Bruck, R.J. 1234, 1235, 5610.
Bruckner, W.L. 6073.
Bruckner, D.A. 3303, 3308, 7408, 7429, 8441.
Brudny, R.A. 7398.
Brudny, G.W. 5189.
Bruckner, B. 5395.
Brueh, R.B. 6907.
Bruhn, J.A. 1105.
Bruijnberg, P.M. 991.
Bruij, J. 7557.
Brumfit, W. 2198, 4841, 652.

- Brumm, T.J. 4108.
 Brummer, E. 2535.
 Bruna, C.D. 2282.
 Brunell, P.A. 4168, 7567.
 Brunelle, J.A. 7552.
 Brunle, S. 2621.
 Brunk, D.D. 1162.
 Brunnemann, H. 9278.
 Bruner, D. 3158.
 Brunner, F. 9189, 9311.
 Brunner, W. 2127.
 Brunson, D.H. 7638.
 Brusch, M. 5108.
 Bruscolini, F. 203.
 Brusignini, F. 3992.
 Bruszewski, J. 6651.
 Bruton, C.J. 4845.
 Bruin, B. 6547.
 Bruynesteyn, A. 3001.
 Bruzeese, E. 8012.
 Bryan, B.A. 2169.
 Bryan, D. 550.
 Bryan, H.H. 1228.
 Bryan, J.R. 538.
 Bryan, L.E. 761, 4696, 6407, 7349, 7350, 9081.
 Bryant, J.K. 1604.
 Bryant, J.L., Jr. 3331.
 Bryant, R.D. 1896.
 Bryant, T.N. 3760.
 Brychova, E. 3252.
 Bryers, J.D. 9270.
 Bryskier, A. 1388.
 Bryson, Y.J. 8441.
 Buick, L.J. 160, 3616.
 Buachista, T. 4344.
 Buachizze, T. 5973.
 Bubenschikova, S.N. 2766.
 Bublitz, F. 2763.
 Bucci, P. 7664.
 Bue, G. 6758.
 Buchanan, R.L. 218, 7040, 7913, 8723.
 Buchanan, T.M. 539.
 Buchberger, W. 1395.
 Buchenauer, H. 8911.
 Bucher, C. 1659, 3262, 3296.
 Bucher, D. 1567.
 Bucher, D.J. 1541.
 Buchholz, K. 8553, 8581.
 Buchholz, W.G. 8866.
 Buck, G.A. 7119.
 Buck, G.E. 755, 5032.
 Buck, K.W. 6279, 8374.
 Buckle, C. 2597, 2724.
 Buckland, A. 2484.
 Buckland, B.C. 518, 5805.
 Buckle, A.E. 7047.
 Buckler-White, A.J. 6602.
 Buckley, A.M. 7280.
 Buckley, H.R. 1682.
 Buckme, F.L.A. 3222.
 Buckner, R.C. 7979, 8119.
 Buco, S. 1932.
 Buczacki, T. 1157.
 Buddenhagen, I.W. 2881, 4576, 8893.
 Buddenhagen, I.W., II 1177, 1190.
 Buclow, F.H. 8877.
 Buernostro, J.L. 2750.
 Buergell, C.D. 3323.
 Buergler, H. 5045.
 Buerscher, R. 8699.
 Buessing, M.A. 3156.
 Buffard, Y. 5739.
 Bugany, H. 8334.
 Buggy, B.P. 1592.
 Buglova, T.T. 927, 5982.
 Buhatel, T. 7014.
 Bui, K. 3433, 4271.
 Bukema, W.E. 5676.
 Bukharin, O.V. 5585.
 Bukholm, G. 5898.
 Buklova, V.N. 5198, 6054.
 Bulant, V. 7670.
 Bulba, N.P. 4398.
 Bulgakova, V.G. 7467.
 Bulgarelli, M.A. 8719.
 Bull, R.H. 5875.
 Bull, L. 1349.
 Bull, J.R. 7783.
 Bull, M.A. 3196, 9227, 9233.
 Bull, P.B. 3870.
 Bulla, L.A., Jr. 7790.
 Bullemann, L.B. 3703, 7042.
 Bulpe, R.H. 7517.
 Bullard, G. 5028.
 Bulling, E. 2360.
 Bulson, P.C. 9252.
 Bunce, N.J. 6161.
 Bunderson, E.D. 5518.
 Bunge, H.R. 5278, 5848.
 Bunker, R.H. 2639.
 Bunina, Z.F. 1741.
 Buryan, N.I. 6933.
 Burand, J.P. 6901.
 Burbank, D.E. 592.
 Burdask, N.M. 672, 684.
 Burdick, D.A. 840.
 Burdick, R.S. 5500.
 Burdick, L.G. 1889.
 Burdick, C.R. 3190.
 Burdick, D. 1066.
 Burditt, S.J. 7898, 8713.
 Burdon, J.J. 3872.
 Burema, J. 1031.
 Burg, W.R. 1901.
 Burge, M.N. 3833.
 Burge, W.D. 5840.
 Burgener, D.M. 3690.
 Burger, D. 6212.
 Burger, J.A. 8931.
 Burger, J.F. 7789.
 Burger, J.S. 2394.
 Burges, H.D. 3580, 6924.
 Burgess, B.K. 1816, 2606.
 Burgess, E.C. 9277.
 Burgess, K. 199.
 Burgraff, A.J. 4593.
 Burgraff, A.J. 9266, 2974, 8157.
 Burgoyne, G.H. 2021.
 Burguillo, F.J. 2624.
 Burgyan, J. 8042.
 Burke, D.S. 593, 615.
 Burke, V. 2767, 6412, 8414.
 Burke, W.F., Jr. 2666.
 Burkholder, J.K. 7561.
 Buricau, R. 8348.
 Burleigh, J.R. 7946.
 Burlingame, G.A. 2391.
 Burman, L.G. 3312.
 Burn, J. 5868.
 Burnett, H.C. 2003.
 Burnette, W.N. 6608.
 Burns, E.E. 1144.
 Burns, G. 6831.
 Burns, I.G. 1159.
 Burns, M.C. 5008, 5029.
 Burns, N.J., III 9116.
 Burns, R.G. 4624, 5092.
 Burpee, L.D. 6308.
 Burr, R.C. 8657.
 Burr, T.J. 279, 6252.
 Burrage, T.G. 4999.
 Burtill, H. 149.
 Burris, R.H. 19, 1774, 6858.
 Burrows, P.M. 7927, 8445.
 Burns, P.B., II 7979, 8119.
 Burshtein, E.M. 7389.
 Burstein, E.A. 7706.
 Burton, K.W. 8168.
 Butcher, D. 3141.
 Busch, A.W. 4925, 7497.
 Busch, C.D. 7509.
 Busch, R.H. 8885.
 Busche, R.M. 3414, 5103.
 Busse, G. 897.
 Busch, K. 1450, 5959.
 Bush, L.P. 7979, 8119.
 Bush, P.B. 9002.
 Bushell, M.E. 5091, 9342.
 Buskirk, H.H. 7360.
 Busolo, F. 657.
 Busse, M. 8998.
 Busse, M.K. 569.
 Bussereau, F. 4765.
 Busta, F.F. 1073, 7021, 7026.
 Bustamante, M. 8806.
 Busto, F. 2620, 3454.
 Busuttill, R.W. 7548.
 Butchalaigh, G. 6735.
 Butin, H. 2105, 5598, 5609.
 Butler, J.H.A. 5685.
 Butler, L.C. 727.
 Butler, P.C. 379.
 Butler, W.R. 1320.
 Buttorin, A.S. 8003.
 Butova, L.G. 6486, 6491.
 Butt, D.J. 2001.
 Buttazzoni, L. 7877.
 Butterworth, D. 5760.
 Butzler, J.-P. 7628.
 Butzler, P.J. 9179.
 Buu-Hoi, A. 3025, 9073.
 Buvet, R. 5695, 5698, 5940.
 Bualwala, J.G. 3934, 5577, 5623.
 Buxton, T.B. 6772, 7604.
 Buyak, E.I. 9016.
 Byak, E.B. 4074, 5018, 6592.
 Bykovskiy, V.Ya. 4380, 6095, 7779.
 Bykovskiy, V.Ya. 5210.
 Bylinkina, E.S. 2276, 2277, 6545.
 Bynum, L.M. 1943, 1944.
 Byrmova, N.E. 6050.
 Byrde, R.J.W. 5185.
 Byrt, P.N. 3912.
 Bystron, A.G. 4898.
 Bystrova, L.V. 4993.
 Byther, R.S. 3911.
 Bywater, M.J. 530, 6467.
 Cabelli, V.J. 2342, 2390.
 Cabezon, T. 6631.
 Cabral, J.M. 3535.
 Cabras, P. 990.
 Cabrera-Juarez, E. 4749.
 Cabrera, M. 110.
 Cabunagan, R.C. 7156.
 Caddy, B. 1950, 3741, 8734.
 Cagle, W.G. 9154.
 Cahagnier, B. 2051.
 Cahill, V.R. 4465.
 Cailliet, M. 9248.
 Cairns, W.L. 1878.
 Cairo, P.R. 7496.
 Cajal, N. 462, 463.
 Calam, C.T. 2269.
 Calamari, L. 7876.
 Calcinio, M. 6841.
 Calcott, P.H. 6578.
 Caldas, R.A. 1740.
 Calder, M.A. 9163.
 Caldwell, E.E. 5059.
 Caldwell, H.D. 753.
 Caldwell, K.E. 1563.
 Calfeano, A. 9109.
 Callahan, J.G. 7388.
 Callander, I.J. 1861.
 Calligaro, L. 2575.
 Callieri, A. 1734.
 Callieri, D.A. 153.
 Callihan, C.D. 5704.
 Callihan, D.R. 4988.
 Callihan, R.H. 8019.
 Calomiris, J.J. 8433.
 Calton, G. 5429.
 Calu, J. 7798.
 Calverley, M.J. 2263.
 Calvert, H.E. 8248.
 Calvet, J.-L. 6138.
 Calvete, J.S. 6225.
 Calvo, A. 6336.
 Calzada, F. 5272.
 Calzada, J.F. 7515.
 Calzolari, A. 7161.
 Cama, L.D. 6576.
 Camargo, E. 6630.
 Camargo, I.J.B. 8005.
 Cambardella, L. 1259, 4638.
 Cambillau, C. 7666.
 Cambou, B. 7769.
 Cameron, A.S. 3220.
 Cameron, S.C. 8417.
 Camguilhem, R. 8308.
 Camacho, C. 8156.
 Cammack, R. 3407.
 Camp, B.J. 7896.
 Campbell, A.D. 8729.
 Campbell, C.A. 8960.
 Campbell, C.L. 3830, 4583.
 Campbell, C.L. 8172.
 Campbell, D.F. 1051, 6983.
 Campbell, G.S. 1051, 2699, 3110.
 Campbell, N.A. 2091.
 Campbell, P.G.C. 7838.
 Campbell, R. 372, 1036, 4238.
 Campbell, R.N. 1673.
 Campbell, V. 5372.
 Camper, A.K. 8415.
 Campopiano, G.C. 681.
 Campos-Takaki, G.M. 6878.
 Campos, J. 6420.
 Campos, J.M. 1557, 4853.
 Campos, P.J. 8841.
 Camus, J.-L. 6546.
 Canale-Parola, E. 6824.
 Cancrini, G.C. 6721.
 Candresse, T. 8451.
 Cane, D.E. 7452.
 Cane, P.A. 1302.
 Canellakis, E.S. 2655.
 Canellakis, S. 2588.
 Canepari, P. 3102.
 Canet, D. 8957.
 Canevacchini, G. 4272.
 Canez, V.M. 1139.
 Canfield, M.L. 6752.
 Cannizzaro, G. 3844.
 Cannon, C. 7759.
 Cannon, F. 1280.
 Cannon, H.J. 4189.
 Cannon, J.J. 3447.
 Cano, L.E. 2538.
 Canonica, L. 2715.
 Canonicio, P.G. 4020, 9117.
 Cantalupi, A. 6721.
 Cantale, W.W. 125, 6103.
 Cant'srs, G.W. 2564, 6928.
 Cantliffe, D.J. 1228, 3804.
 Canton, E. 537.
 Cantor, R.R. 2178.
 Cantrell, M.A. 8996.
 Cantwell, G.E. 125, 6103.
 Cao, H.-Y. 7907.
 Cao, T.-Q. 7182.
 Capasso, F. 9204.
 Capasso, R. 8746, 8747, 8824, 8848.
 Capitolio, C. 2240.
 Capon, R.J. 9133.
 Capor, S.P. 8775.
 Capra, V. 7876.
 Capelletti, L. 1402.
 Capra, E. 6508, 6509, 6526.
 Caprioli, A. 3753.
 Capuzzo, M. 6719.
 Caputo, R.A. 1381.
 Caran, H.S. 8537, 8539, 8692.
 Carasik, W. 5145.
 Carlson, J. 820.
 Carbone, A. 6719.
 Cardillo, R. 8631.
 Cardon, J.A. 5445.
 Cardoso, J.P. 3535.
 Cardwell, S.C. 3980, 3981, 7524.
 Carew, J.A. 4677.
 Carey, A.C. 8948.
 Carey, E.E. 8091.
 Carey, J.K. 1241.
 Carey, S.T. 527.
 Cargoe, R. 2857.
 Carini, E. 8396.
 Carle, G.F. 9335.
 Carlemalm, E. 9314.
 Carlisle, A. 2910.
 Carlisle, M.F., Jr. 980, 1619.
 Carlson, B.A. 1662.
 Carlson, G.A. 242.
 Carlson, J. 6619.
 Carlson, L.G. 2519.
 Carlson, P.S. 2817.
 Carlson, R. 5913.
 Carriv, F. 6445, 8748.
 Carman, G.M. 3364, 4225.
 Carman, R.J. 4481.
 Carmen de Arriola, M. 5272.
 Carmichael, C.L. 7555.
 Carmichael, L. 8715.
 Carmine, F. 3169.
 Carnegie, S.F. 2812.
 Carnero, M.E. 1547.
 Carnero, R. 1345, 1543, 1544.
 Carniti, P. 6674.
 Caron, M. 8464.
 Carpenter, J. 4429.
 Carpenter, J.L. 6222.
 Carpenter, S.K. 604.
 Carr, G.R. 6375.
 Carr, J.P. 1141, 8928.
 Carr, R.J. 244.
 Carasco, L. 1350, 2233, 8374.
 Carre, E. 173.
 Carrea, G. 5131, 6090.
 Carreira, L.H. 5283, 5284.
 Carret, G. 7404.
 Carrey, E.A. 5156.
 Carrio, J. 5911.
 Carroll, J.O. 5145.
 Carroll, R.B. 8770.
 Carson, J. 1040.
 Carson, M. 7371.
 Carsta, C. 8635.
 Carter, C. 5918.
 Carter, J.B. 2662.
 Carter, A.K. 5669.
 Carter, M.V. 6307.
 Carter, P. 8573.
 Carter, P.R. 2165.
 Carter, W.T. 3101.
 Cartwright, D. 3777.
 Cartwright, S.F. 7487.
 Carugati, G.P. 3111.
 Caruso, F. 3840.
 Carvalho, A. 8804.
 Carver, M. 4503.
 Casabuona, F. 499.
 Casal, M.J. 4719, 4850.
 Casals, J. 596.
 Casarin Valverde, A. 5361.
 Casas-Campillo, C. 1714.
 Casas-Finiet, J.R. 4259.
 Casacione, M. 5735.
 Casella, S. 9020.
 Casewell, M.W. 4727.
 Casey, G.P. 8667.
 Casey, P. 1286.
 Cashman, J. 1667, 3339.
 Casida, L.E., Jr. 3335.
 Casinovic, C.G. 8742.
 Cason, K.M.T. 371.
 Casper, D.H. 1125.
 Casper, R. 4504, 8804.
 Cassai, E. 9118.
 Casse-Delbart, F. 4660.
 Cassels, A.C. 3904.
 Cassidy, D.S.M. 8046.
 Castaigne, F. 6969.
 Castaneda, H.O. 7515.
 Castberg, H.B. 2733.
 Casteln, J. 5324.
 Castellana-Pastoria, M. 4940.
 Castellano, G.A. 436.
 Castellano, M.A. 3844.
 Castello, J.D. 8951.
 Castignetti, D. 3966.
 Castilleja, G.G. 4645.
 Castilleja Ayala, J. 1902.
 Castillo, F.J. 2577, 6012, 8541.
 Castle, B.E. 4985.
 Castle, D. 2477.
 Castle, T.M. 2927, 4877.
 Castilia, R.B. 3686.
 Castro, C.E. 6159.
 Castryck, F. 7596.
 Casucci, L. 9204.
 Caswell, P. 2445.
 Catley, B.J. 8620.
 Catlin, B.W. 6445.
 Catlin, G.H. 2228.
 Catron, T.L. 3352.
 Caska, V. 2146.
 Cauchon, N. 8533.
 Caul, E.O. 1538, 1555.
 Cawenbergh, G. 7381.
 Cavalieri, S.J. 7419.
 Cavallera, V. 2874.
 Cavalli, B. 2284, 6568, 9190.
 Cavallo, R. 9136.
 Cavalloro, R. 5944.
 Cavanagh, D. 6637.
 Cavanaugh, F., Jr. 8335.
 Cavarelli, C. 3252.
 Cavazzini, G. 5855, 8337.
 Cave, D.R. 4987.
 Caveller, M. 2770, 2788.
 Cavender, J.C. 387.
 Caviglioli, R. 988.
 Cavalli, V. 2874.
 Cawthon, L. 3402.
 Cayley, G.R. 5371.
 Cayrol, J.C. 5218.
 Cazenave, C. 4169.
 Ceccherini, R. 8337.
 Cecchi, C. 3259.
 Cech, L. 8733.
 Cech, T. 6811.
 Ceglowski, P. 4328.
 Celler, K.M. 4536.
 Cenci, P. 5855.
 Cepeda, M. 3747.
 Cerecek, J.F. 2422.
 Cerini, C.P. 1567.
 Cermak, J. 7671.
 Cerre, E. 6964.
 Cerniglia, C.E. 2187, 2188.
 Cerny, R. 8242.
 Cerny, A. 355.
 Cesar, E.V. 1352.
 Cevenini, R. 2476, 3234, 6734.
 Chabbert, Y.A. 3038, 5768.
 Chabry, J. 2567.
 Chaboud, A. 4622.
 Chaby, R. 7124.
 Chabr, B. 7124.
 Chabr Borges, A. 7005.
 Chaffin, D.O. 7338.
 Chaffotte, A.F. 6007.
 Chaign, B.A. 1411, 4044.
 Chagnon, R. 8458.
 Chahal, D.S. 1004.
 Chai, T. 8720.
 Chaicumpa, W. 1087.
 Chalet, L. 6562.
 Chalikovsky, S.M. 476.
 Chain, B.M. 451.
 Chakraborty, N. 3679.
 Chakrabarti, N.K. 8609.
 Chakrabarti, N.K. 7878.
 Chakrabarti, S. 4869.
 Chakrabarti, S.N. 5475.
 Chakrabarty, A. 3037.
 Chakrabarti Rao, V. 2431.
 Chaldecott, M.A. 1158.
 Chalik, P.M. 2906, 2985, 2986.
 Chaloupka, J. 4292.
 Chalutz, E. 9734.
 Chamaliot, M. 7516.
 Chamber, M.A. 2122.
 Chamberlin, M. 59.
 Chambers, H.F. 7233.
 Chambers, R.J. 5343.
 Chambliss, G.H. 5182.
 Chamier, A.-C. 1002.
 Champ, M. 1815.

Author Index

- Chan-Sanchez, R.D. 8060.
Chan, D.T. 7304.
Chan, E.C.S. 3265.
Chan, E.L. 1387.
Chan, F.T.H. 7581.
Chan, K.Y. 98.
Chan, M.K.-H. 4418.
Chan, M.K.-H. 4424.
Chan, R.E. 4173.
Chan, R.R. 8650.
Chan, S.I. 1409.
Chan, S.I. 5183.
Chan, W.L. 4254.
Chan, Y.K. 3595.
Chanai, M. 7403.
Chance, B. 7755.
Chand, T. 2021.
Chander, H. 1805, 7893.
Chandler, H.M. 8461.
Chandler, J.L. 5625.
Chandra, A.K. 1821, 7758.
Chandra, A.L. 4869.
Chandra, H. 5505, 9106.
Chandrasekar, P. H. 6434.
Chandrasekar, M. 3843.
Chang, A.C. 7519.
Chang, C.-C. 2810.
Chang, C.-M. 7746.
Chang, C.-W. 7023.
Chang, C.H. 8662.
Chang, D.S. 3015.
Chang, F.-H. 6808, 6809.
Chang, H.M. 5321.
Chang, H.N. 7735.
Chang, H.W. 6583.
Chang, J.-D.T. 7486.
Chang, J.C.H. 9263.
Chang, P.L. 3986.
Chang, P.W. 423.
Chang, T.W. 229.
Chang, T.W. 6217.
Channon, A.G. 4521.
Channoum, M.A. 1024.
Chanoock, R.M. 6595, 6599, 6602, 6604, 6630, 6800.
Chant, S.R. 312, 5407, 6234, 6236.
Chantarasak, V. 5841.
Chao, W.-L. 2161.
Chapat, M. 5868.
Chapman, D.V. 3052.
Chapman, R.A. 6387.
Chapman, S.J. 2936, 6051.
Chapman, W.B. 7080.
Chappella, A.H. III 3921.
Chappa, A. 4738.
Characklis, W.G. 417, 3205.
Charilaou, C.C. 2443.
Charles, A.M. 6847.
Charles, J.-F. 127, 3572, 4491, 6089, 6635.
Charley, R.C. 3615.
Charlier, P. 1760, 3177, 5985.
Charoensri, K. 2658.
Chatterjee, J. 7522.
Chatterjee, G. 3037, 8768.
Chatterjee, P. 1700.
Charudattan, R. 3897, 4249.
Charya, M.A.S. 3797, 8340.
Charyulu, P.B.B.N. 1273.
Chase, A.R. 1162, 3910, 4563, 4667, 6255, 8128.
Chase, F.E. 7249.
Chase, T.E. 367.
Chase, D. 8434.
Chasseur-Libotte, M.L. 4001, 6441, 6963.
Chassy, B.M. 5345.
Chastagner, G.A. 3911.
Chastel, C. 1527.
Chatrapaul, L. 2910.
Chatter, K.F. 4845.
Chatterjee, D.K. 3679.
Chatterjee, G.C. 3037, 8768.
Chatterjee, M. 1732.
Chatterjee, S.K. 6123, 7799.
Chatterjee, S.N. 3993.
Chatterjee, S.P. 1732, 4265.
Chattopadhyay, B. 7592, 9099.
Chau, K.F. 1154.
Chau, P.Y. 508, 7322.
Chaudhary, A.H. 2969, 8151, 8158.
Chaudhary, R.C. 3862, 8800.
Chaudhry, I. 6079.
Chaunhan, V.B. 8107.
Chavo, E. 1900.
Chaves, J. 7886.
Chawla, S.K. 3183.
Che, S.-Z. 9289.
Cheatham, S.F. 454.
Chedid, L. 6656, 8388, 9219.
Chelma, S.S. 8807.
Cheltham, R.D. 6712.
Chetoff, C.J. 3749.
Chelna, M. 7427.
Chelazzi, G. 8954.
Chelkowski, J. 225, 226, 1079, 1080, 5373.
Chelokova, S.S. 7008.
Chen, B.-E. 7657, 7658.
Chen, C.-M. 2810.
Chen, C.H. 5480.
Chen, F.C. 8641.
Chen, G.C. 7721.
Chen, H.-K. 404.
Chen, H.-M. 2714, 5812.
Chen, J.-S. 6839.
Chen, J.H.S. 1348.
Chen, K.-C. 7746.
Chen, K.-H. 5316, 7003.
Chen, K.C.S. 339, 772, 7627.
Chen, K.H. 6980.
Chen, L.-F. 3447.
Chen, L.F. 3656.
Chen, M.E. 3758.
Chen, M.H. 4523.
Chen, M.H.M. 1954.
Chen, P.M. 7585.
Chen, P.N. 532.
Chen, P.T. 9115, 9121.
Chen, R.-G. 4991.
Chen, R.-T. 7182.
Chen, S.J. 7679.
Chen, W.Y. 8113.
Chen, X.-R. 5029.
Chen, Y. 1948, 7905.
Chen, Y.-Y. 2518.
Chen, Y.P. 3961.
Chen, Y.R. 6702.
Chen, Z.-Y. 7182.
Chenas, N.K. 7722.
Cheng, J.-N. 7445.
Cheng, S.S. 3192, 4109.
Cheng, Y.-C. 4022, 9125.
Cheng, Z.-M. 8796.
Cherbulu, V.V. 8860.
Cherch, R.K.H. 3507, 4333.
Cherdyntseva, T.A. 8693.
Chereau, D. 1716.
Chereshkova, E.A. 4182.
Cherif, C. 4542.
Cheriyann, U.J. 4032.
Chermann, J.C. 5983.
Chernajovsky, Y. 3424.
Chernomys, M. 599, 2429.
Chernysky, M.A. 760, 9279.
Chernykh, I.P. 925, 6014, 7739.
Chernykh, V.T. 4313.
Chernukha, B.A. 822, 6790.
Chernykh, S.I. 5910.
Chernyshev, A.I. 6580.
Cheruy, A. 6546, 6692.
Chervenic, P. 8357.
Chervan, M. 1869, 3590, 7804.
Chesbro, W.R. 6773.
Chesnut, S. 2523.
Chessin, M. 4573.
Chesher, B. 1654.
Chestukhin, G.G. 5153.
Chervan, M. 1869, 3590, 7804, 2023, 2073, 4589, 8228.
Chettanachit, D. 4520, 8100.
Cheung, B.A. 6176.
Cheung, E.Y. 3239.
Cheung, K.-S. 4736.
Cheung, R. 4710, 7323, 9166.
Chevron, F. 5158.
Chezzi, C. 3345, 9112.
Chian, E.S.K. 2372, 4109, 5843.
Chiang, M.S. 300.
Chiang, Y. 2717.
Chiarillo, G. 9204.
Chiba, S. 1735, 5981, 6851.
Chibata, I. 7, 37, 75, 850, 1756, 3379, 3443, 4232, 5102, 9341.
Chiesa, S.C. 4913.
Chick, A.W. 6241.
Chilcott, C.N. 137.
Chile, S.K. 5518.
Chin, K.M. 5422, 8791.
Chin, M. 1432.
Chin, N.-X. 449, 4730, 7430.
Chin, Y.K. 8557.
Ching, C.B. 8534.
Ching, K.K. 6318.
Ching, T.M. 6318.
Chino, M. 7492.
Chiori, O.C. 8349.
Chiu, E.F. 9125.
Chiple, J.R. 6817.
Chirife, J. 6960, 8698.
Chirkov, S.N. 7915.
Chistyakova, I.K. 7287.
Chistyakova, T.A. 214.
Chitayman, M.B. 9200.
Chitoyan, O. 1087.
Chi, D. 3416.
Chi, M.L.C. 7102.
Chimara, H. 6043, 8382.
Chmelar, D. 4216.
Chmielewski, M.A. 2129.
Cho, B.R. 5015.
Cho, D.T. 6438.
Cho, Y.-J. 5252.
Cho, Y.K. 151, 2185.
Chohan, J.S. 2033.
Choi, C.S. 9290.
Choi, C.Y. 4054, 5083.
Choi, G.Y. 7773.
Choi, S. 7817.
Cholette, H. 7749.
Chompreda, P.T. 5355, 5357.
Chongo, B. 1921.
Chopra, M.A. 19049.
Chopra, B.L. 8059.
Chopra, C. 434.
Chopra, I. 746, 6496.
Chordas, A. 3853.
Chotson, J. 35.
Chotani, G.K. 3605.
Chouel, H. 3749.
Chow, M. 6614.
Chowdhury, B. 9139.
Chowdhury, A.A. 7255.
Chowdhury, B. 5535.
Chowdhury, S. 5043.
Chrastova, V. 7623.
Christ, B. 1106, 2857.
Christ, B.J. 2780.
Christensen, B.G. 6536, 6576.
Christensen, B.T. 2942, 5683.
Christensen, D.H. 224.
Christensen, D.L. 775.
Christensen, O. 5537.
Christensen, P. 717.
Christiansen, A.L. 3751.
Christiansen, E. 1237, 8173.
Christiansen, G. 4889.
Christianson, G.G. 7395.
Christie, E. 5376, 7403.
Christie, R.G. 8825.
Coates, S.R. 3815, 3825.
Christy, P.E. 3220.
Chrostowski, P. 6672.
Chrzanoski, T.H. 7534.
Chu, A. 5046.
Chu, C.-Y. 2323.
Chu, E.Y. 6266.
Chu, F.S. 3740, 3743, 7082, 8757.
Chuan, M.G.S. 7817.
Chuang, R.Y. 4148.
Chuang, T.Y. 387.
Chubb, H. 4478.
Chughtai, M.I.D. 3520.
Chulan, A. 7260.
Chulze, S. 7061.
Chun, D. 6438.
Chun, M. 72.
Chung, R. 4890.
Churcher, M.J. 5723.
Churchill, B.W. 3895.
Churkina, L.N. 7313.
Churn, C.C. 475, 6484.
Churn, J. 331, 792, 973, 1213, 2023, 2073, 4589, 8228.
Cialdella, J.J. 2298.
Ciampi-Panno, L. 2015, 7210.
Ciano, V. 567.
Ciardi, C. 1264.
Ciegler, A. 151, 3654, 3746, 6105.
Ciemiewska, A. 1080.
Ciferri, O. 3391.
Ciffo, T. 3632.
Cimarusti, C.M. 4325, 6583.
Cimerman, A. 6816.
Cimino, G. 9128.
Cin, A. 5509.
Cincochi, D.A. 3225.
Ciordas, C. 2324.
Cipriani, E. 4166.
Cipriani, P. 7441.
Cignolani, M.C. 4225.
Cirman, Z. 6934.
Cisalpino, E.O. 5864.
Ciron, D.M. 7610.
Ciufo, L.M. 7911.
Civas, A. 5984, 5988.
Chiu, E. 7517.
Cizmarik, J. 7541.
Claydens, M. 6867.
Clafin, L.E. 7947.
Clardy, J. 1954, 6563.
Clarlom, M. 4610.
Clarf-Curtiss, J.E. 757.
Clark, A.M. 3548.
Clark, C.S. 4096, 4911.
Clark, D. 4794.
Clark, D.S. 6037.
Clark, E. 1588.
Clark, E.M. 1227, 8790.
Clark, J.B. 5265.
Clark, L. 1539.
Clark, M.F. 1968.
Clark, N.G. 9103.
Clark, S.J. 3936.
Clark, S.A. 3132, 7807.
Clark, V.L. 735.
Clarke, A.J. 1780, 7726.
Clarke, A.M. 4809.
Clarke, J. 6716.
Clarke, J.R. 5009.
Clarke, L. 820.
Clarke, M. 5992.
Clarke, N.A. 1500.
Clarke, P.H. 3397, 7821.
Clarke, R.G. 8031.
Clarkson, J. 8390.
Clarkson, J.D.S. 1133.
Claus, G.W. 178.
Claus, R. 7308.
Clausen, E.C. 3417, 3637, 5292, 5703.
Claxton, L.D. 7597.
Claydon, N. 6926.
Clayton, J.L. 5419.
Cleary, T. 7348.
Cleary, T.J. 2243.
Clesner, B. 691.
Cleland, N. 676.
Clelland, M.D. 2927, 8243.
Clementi, F. 6931, 6992, 7816.
Clements, M.L. 2325, 2326, 2471, 6602.
Clemmons, K.V. 716.
Clermeau, M. 2883.
Cleveland, P.H. 595.
Cleveland, T.E. 1749.
Clifford, D.R. 2887.
Cline, S. 3855.
Cliver, D.O. 5010, 5013, 9243, 9266.
Conley, P.E. 9090.
Cloete, T.E. 7512.
Clowes, R.C. 7121.
Cluss, R.G. 5893.
Cluzel, M. 7403.
Cobbs, E. 5376, 7403.
Coakley, S.M. 252, 1095.
Coates, D. 2473, 4210, 5035.
Coates, S.R. 616.
Coates, T.F. 5851.
Cobb, E. 7567.
Cobb, F.W. Jr. 3924, 4613.
Cobb, C.G. 1382.
Cocci, A.A. 7520, 8273.
Cochet, N. 3506, 4334.
Cochran, K.W. 1459.
Cocito, C. 8376.
Cochran, J.R. 7147.
Cockrum, P.A. 1425, 3735.
Cocks, G.G. 4173.
Coccucci, M. 8739.
Coccuzza, G. 6542.
Coddington, A. 3990.
Cody, H.J. 3228, 5858.
Cody, Y.S. 2804, 5409, 8813.
Coen, D.M. 9068.
Coffey, M.D. 3837, 5528, 5533, 6133, 7383, 8046, 8124.
Cogan, T.M. 5240.
Coghlan, J.R. 7147.
Cohen, A. 8446.
Cohen, B.J. 4151.
Cohen, D.R. 4449.
Cohen, G. 890, 6639.
Cohen, L. 2048.
Cohen, M. 129.
Cohen, M.L. 1084, 4690, 7414.
Cohen, S. 1150, 9327.
Cohen, S.D. 805, 8203.
Cohen, S.N. 2.
Cohen, Y. 341, 439, 2076, 2894, 4549, 887.
Coker, R. 6228.
Colarutolo, J.F. 4920.
Colarutolo, J.R. 5313.
Colas, B. 907.
Colbeau, A. 2567.
Colbourne, P. 5671.
Colbourne, J.S. 4931.
Colby, C. 1346.
Cole, A.L.J. 381, 8226.
Cole, C.V. 5668.
Cole, D.J.A. 5351.
Cole, H.B. 2491.
Cole, J.A. 6886, 8559.
Cole, R.J. 6205, 8755.
Coleman, D.C. 4631, 4638, 5576, 5668, 7268.
Coleman, D.L. 7544.
Coleman, J.P. 3514.
Coleman, L.W. 8797.
Coleman, R.M. 631, 652.
Coley-Smith, J.R. 975, 1156, 7175, 8043.
Colhoum, J. 2812.
Colin, F. 7506.
Colin, J. 1527.
Coll, A. 3949.
Collatz, E. 4687.
Collen, T. 6741.
Collendavello, J. 7193.
Colleran, E. 1712, 6683.
Collier, R.J. 624, 7119.
Collings, S.K. 7035.
Collins, E.B. 2643.
Collins, J.K. 6782.
Collins, M.D. 6894.
Collins, M.H. 8777.
Collins, M.S. 6663.
Collins, M.T. 692.
Collins, N.E. 4463.
Collins, P. 6359.
Collins, V.W. 4583.
Colstee, J.J. 6822, 4131, 4205, 4937, 4961, 6711, 9286.
Colwell, R.P. 1822, 4131, 4205, 4937, 4961, 6711, 9286.
Colyer, P.D. 8112, 8870.
Comai, L. 4558.
Coman, R. 8348.
Combarro, P. 9072.
Comberbach, D.M. 160, 3616.
Combes, P. 835, 5160.
Combridge, B.S. 1546.
Comeau, A. 5414, 8072.
Common, T.J. 426.
Comper, A.L. 5258, 5259.
Comrie, J. 3311.
Concannon, J.N. 5260.
Conceptor, N.J. 3259.
Concia, E. 1384.
Concone, B.R.V. 8682.
Condamines, J.L. 1901.
Condon, S. 2686.
Conero, V. 3248.
Conroy, D. 3690.
Conley, P.E. 9090.
Conlin, C.A. 4949.
Connacher, R. 9181.
Conner, A.J. 2082.
Conner, D.E. 3064, 8318.
Conrad, H.R. 4467.
Conner, R.L. 2882.
Connor, E.M. 2470.
Connor, J.D. 461.
Connor, J.K. 7015.
Connor, M.A. 989.
Conrad, H.R. 4467.
Conrad, J.R. 4907.
Conrad, N.G. 3852.
Conradie, J.D. 1939.
Conscience, P.J. 8674.
Consiglio, M. 4099.
Constantinides, A. 3475, 3605, 3632, 4250.
Conti, G. 9112.
Conti, M. 4566.
Conti, P.A. 4074.
Contreras, M.A. 8882, 8884.
Contra, S. 5160.
Convers, R.H. 6207, 8004.
Conway, J. 5481.
Conway, L.K. 7033.
Conway, R.S. 8506.
Conway, W.S. 3850.
Cook, A.A. 4582, 8070.
Cook, M. 1012, 2698, 4226, 7834, 8691.
Cook, C.B. 3297, 7583.
Cook, E.C. 3075.
Cook, E.H. 7539.
Cook, F.I. 1178, 1179.
Cook, F.J. 2149.
Cook, F.K. 7028.
Cook, J.A. 5014.
Cook, R.J. 332, 844, 1091, 1126, 1133, 1985, 4231, 79.
Cook, L.R. 2887.
Cook, R.C. 974, 2079.
Cooksey, K.E. 417.
Coolaugh, J.C. 3118, 4851, 1.
Cooley, S.J. 8927.
Coombs, G.H. 6449.
Coombs, R.A. 5885, 7566.
Cooney, C.L. 151, 170, 852, 5966, 6865, 8633.
Cooney, J.J. 1301.
Conrod, J.D. 3378, 4160.
Cooper, B.H. 7638.
Cooper, D.G. 1846.
Cooper, D.J. 2644.
Cooper, J. 1943.
Cooper, J.A. 3222.
Cooper, J.E. 7778, 7279.
Cooper, J.L. 1238, 7990.
Cooper, L.A. 8626.
Cooper, C. 3159.
Cooper, R. 126, 1450, 2283.
Cooper, S.J. 7080.
Cooperman, B.S. 3487, 3511.
Coopes, S. 7607.
Copcu, M. 1986.
Coperman, R.J. 8464.
Copes, C.J. 7126.
Copley, J.B. 1633.
Coppenhaver, D.H. 5744.

- Coppi, G. 3111.
Coppolechia, P. 1551.
Corbel, M.J. 5063.
Corbellini, C.N. 7269.
Corbett, D.C.M. 8121.
Corbett, D.F. 6579.
Corbin, J.L. 1816.
Corbo, P. 4084.
Cordano, A.M. 6717.
Cordewener, J. 2608.
Cordova, M.M. 4629.
Corey, L. 601, 2231.
Cora Jimenez, R. 5383.
Corigliano, B.E. 4752.
Cork, D. 3612.
Cork, D.J. 3977, 5693.
Cork, M.S. 3439, 7701, 8520.
Corko, C.T. 2174, 6161.
Corkill, E. 4011.
Corlett, C. 1642.
Corman, A. 7289, 9016.
Corman, L. 5183.
Cormier, M. 194.
Cornet, D. 2890.
Cornet, F. 2914, 6355, 8969.
Cornforth, D.P. 6203, 7035.
Cornick, D.E.R. 4969.
Cornish, A. 3133.
Coronado-Vega, B. 10.
Cornorelli, L. 5364, 9213.
Corrado, E. 8824, 8848.
Correa, J.A. 1845.
Correia, R.A. 6425.
Corras, M.V. 8328.
Corrini, D.L. 8019.
Corrini, G.S. 7191.
Cossand, W. 6212.
Cosmaei, M.E. 4134.
Cossaboom, T. 8720.
Cossement, E. 6537.
Cossen, C.K. 614.
Costa, A.L. 5737.
Costa, A.S. 8005.
Costa, C.L. 8212.
Costa, J.L. 2645.
Costa, J.M. 962.
Coste, M. 5772, 7321.
Costello, M. 1496.
Costello, P.J. 7851, 7869.
Coste, S. 1345, 1543, 1544.
Costello, R.N. 2740, 8051.
Costin-Lazar, L. 6708.
Costin, J.D. 7576.
Cote, B. 8156.
Cote, G.L. 6830.
Cotter, E.J. 3775.
Cotton, S.T. 1718.
Cotor, F. 2409.
Cotronese, A. 348.
Cottam, H.B. 9119.
Cottam, P.F. 6811.
Cottew, G.S. 6756.
Cottew, I.W. 8522.
Cottrell, I.W. 8522.
Coty, P.J. 7903.
Coubrough, P. 4943.
Couch, E.E. 699.
Couch, J.A. 6921.
Couch, T.L. 6083.
Couchman, D. 2605.
Couderc, J. 5688.
Coudron, P.E. 3083.
Cousey, H.M. 5469.
Coughlan, M.P. 8674.
Coulaps, A.G. 8454.
Coullet, M. 4789, 6540.
Coulombe, B. 2844.
Coulomb, P.J. 2844.
Coulombe, L.J. 7131.
Coulombe, R. 398.
Coulon, P. 6629.
Coulson, B.S. 8444.
Couteaux, M.M. 4629.
Courant, P. 7516.
Courcol, R. 4827.
Courcol, R.J. 2251.
Courtieu, A.L. 5768.
Cousin, M.A. 6185, 6986, 7841.
Cousio, J.D. 4012.
Couteaux, M.M. 4629.
Coutino, M. 4924.
Coutts, M.P. 5945.
Coutts, R.H.A. 1143, 6279.
Couture, L. 8922.
Couture, M. 1262, 5578.
Couvillon, G.A. 5686.
Covey, R.P. 3942.
Covington, W.V. 8932.
Cowan, D. 50.
Cowan, D.A. 7760.
Covgill, C.A. 7660.
Cowlley, J.A. 5887.
Cowlshaw, A. 8354.
Cowlshaw, W.A. 6466.
Cox, D.J. 4654, 9036.
Cox, D.L. 5034.
Cox, D.N. 898.
Cox, H.U. 9157.
Cox, J.C. 5880.
Cox, M.E. 5076.
Cox, N.A. 1049, 1066, 2738, 3322, 7009.
Cox, R.H. 8755.
Cox, R.L. 2466.
Coyier, D.L. 2807.
Coyne, D.P. 3862, 4501, 5406, 7930.
Crabel, M. 6631.
Crabtree, B.L. 3127.
Crabtree, S. 6948.
Craig, A.S. 5662.
Craig, G.D. 1222.
Craig, G.W. 9315.
Crail, J.M. 8905.
Cramer, F. 930.
Cramer, S.P. 8554.
Crane, R.L. 9114.
Craske, J. 2441, 4156.
Crawell, E.T. 414.
Craven, P. 6772.
Crawford, D.L. 2702.
Crawford, J.A. 2508.
Crawford, J.H. 928.
Crawford, J.J. 1519.
Crawford, M.A. 1220, 7934.
Crawford, R.J. 1610.
Crawford, R.L. 2152.
Crawford, S.A. 3081.
Cremier, N.E. 614, 8442.
Cremieux, A. 1524, 2641, 4720, 9261.
Cress, C.E. 8945.
Crete, R. 300.
Creuzet, N. 7478.
Crews, R.C. 6738.
Crisma, M. 3140.
Crisp, P. 1157.
Crist, A.E., Jr. 698.
Crist, D.K. 5898.
Croakent, F. 537.
Crociari, F. 4043.
Croft, B.J. 3772.
Croisy-Deleoy, M. 4742.
Croitoru, M. 2324.
Crombie-Quilty, M.B. 2357.
Crombie, G. 5833.
Cromwell, G.L. 1317, 2197, 3033, 4466, 5711, 8295.
Crook, B. 1298.
Crook, N.E. 3580.
Crooke, P.S. 5280.
Crooke, S.T. 529.
Crosa, J.H. 867.
Crowthay, B. 9138.
Cross, A. 6401.
Cross, J.H. 1579.
Cross, W.H. 4109, 5843.
Crossen, J.E. 4590.
Crossignani, R.M. 6507.
Crossley, K.B. 4808.
Crotty, R.D. 7534.
Crotty, R.D. 7534.
Crouch, B. 1299.
Crouch, C.F. 4167.
Croughan, M.J. 9163.
Crouse, G.F. 628.
Crout, F.V. 6784.
Crown, F.W. 5024.
Crown, V.L. 1873, 6191, 6994.
Crow, T.D. 5919.
Crow, T.R. 6662.
Crozier, A. 346.
Crues, D.D. 2508, 2511.
Crucifix, D.N. 6304.
Crueger, A. 5093.
Crueger, W. 5093.
Crumpacker, C. 3067.
Crute, I.R. 295, 303, 1157, 1159, 3835, 8141.
Cryz, S.J., Jr. 540, 1624.
Csastorday, K. 4220.
Csarjeski, A.J. 1248.
Csinos, A.S. 1121.
Csizser, Z. 1706, 2321.
Czasmadia, V. 4220.
Csuzi, S. 1775.
Cubero, J. 3791.
Cubie, H.A. 618.
Chuchural, G.J., Jr. 1309, 7348.
Cuddih, P. 5570, 5821.
Cuenca, G. 5624.
Cui, R.-H. 7445.
Cui, J.-F. 4439.
Cumberston, N.J. 772.
Cullen, W.R. 3359.
Cullimore, D.R. 1497.
Cullimore, J.V. 9007.
Cullmann, W. 4704, 5120.
Culnavor, C.C.J. 3735.
Culver, C.A. 6564.
Cumming, E.B. 6759.
Cummins, J.M. 4199.
Cummins, J.N. 3818, 7994.
Cundliffe, E. 6432, 9057.
Cundy, K.R. 2493.
Cunfer, B.M. 7148.
Cunha, B.A. 8496.
Cunliffe, W.J. 2258.
Cunningham, A.L. 8327.
Cunningham, B.R. 8722.
Cunningham, R.L. 3620.
Cuppington, F.P. 4565.
Cuples, D.A. 8823.
Curda, L. 6962.
Curds, C.R. 2540.
Curtis, G.D.W. 726, 6767.
Curtiss, R.I. 7757.
Cusato, M.S. 4652.
Czarniecki, C.W. 4028.
Czech-Kozlowska, M. 5454.
Czerekowicz, T.J. 1343.
Czerwinski, A. 1429.
D'Adamo, P.D. 552.
D'Amato, R.F. 1588, 7625.
D'Aniello, M.A. 8204.
D'Arcy, C.J. 4584, 8091.
D'Arcy, L.M. 6717.
D'Souza, J. 7037.
D'Souza, S.F. 8542.
Da Costa, W.M. 306.
Da Graca, J.V. 4525.
Da Silva Melo Cavalcanti, L.H. 4781.
Da Silva, I.M. 6923.
Dababneh, B.F.A. 4747.
Dabek, A.J. 2046, 2047.
Dabernat, H. 5768.
Dadnawal, K.R. 3967.
Dadd, A.H. 4035.
Dady, J. 8909.
Daemring, R.J. 6634, 6645.
Daengsuhwa, W. 6189.
Daft, G.C. 5515.
Daft, M.J. 5898.
Dagley, S. 6864.
Dagys, R.J. 5194.
Dahab, M.P. 3557.
Dahlia, D.S. 8401.
Dahli, G.A. 4534.
Dahling, D.R. 2393, 7580.
Daigler, G.T. 587.
Daidin, H.A. 3247.
Daidin, R. 5516.
Daikaku, K. 6116.
Daisley, T.L. 4194, 7598.
Dakessian, S. 8222.
Dakora, F.D. 6364.
Dal Belin Peruffo, A. 6876.
Dalsi, P.M. 5123, 7799.
Dalbke, G.R. 7536.
Dalcero, A.M. 7061.
Dale, B.E. 3558, 8536.
Dale, J.L. 3800, 5404.
Dale, R. 2723.
Dall, J.L. 3362.
Dallies, D.J. 904.
Dal'Olio, G. 9109.
Dalmacio, F.I. 7025.
Dalmacio, S.C. 7150.
Dalmat, D.J. 5835.
Dalpe, Y. 1262.
Dalgaard, K. 8620.
Dalton, H.P. 754, 3083, 3274.
Dalton, L.H. 3007.
Dalton, C. 210, 2731.
Daly, J.A. 7617.
Daly, J.M. 32, 1187, 1952, 1955, 2566, 3733.
Daly, N.M. 7798.
Damas, C.E. 3117.
Damato, J.J. 692.
Dane, D.A. 6083.
Damiano, D. 2679, 2680, 4412.
Dandanev, V. 6502.
Dandoglu, A.P. 747, 5369, 5375.
Dancer, B.N. 2408.
Danchev, D. 8321.
Dandawate, C.N. 4984.
Daneq-Moore, L. 8352.
Danevich, M.V. 6440.
Daniel, D. 3063.
Daniel, L.W. 7676.
Daniel, R.M. 7760.
Danielescu, G. 462, 463.
Daniellson, B. 3635.
Daniels, B.A. 824.
Daniels, L. 8271.
Daniels, M.J. 4498.
Danielson, R.M. 7227, 7228, 8162, 8165.
Danielsson, B. 4312.
Danielsson, D. 462, 717, 2481.
Danilevskaya, H. 4076.
Danilova, E.B. 2766.
Danilova, E.G. 1813.
Dankert, J. 1308.
Danko, S.J. 1952, 1955.
Danks, G. 1431, 6448.
Danneberger, T.K. 5429.
Dannenbauer, H. 3886.
Dannetun, E. 3312.
Darsanyi, G.R. 8507.
Darby, G. 5723.
Dartysshire, J.F. 5946.
Darker, R.J. 1584.
Darrach, L.L. 8724.
Darrell, J.H. 2417, 2474.
Dart, P.J. 6232, 8967.
Danas, F. 3061.
Danas, J.M. 8125.
Dannville, J.M. 3242, 7558.
Darwazeh, H. 1845.
Darwazeh, A.B. 6914.
Darweesh, M.M. 7138.
Das, B.C. 2411.
Das, K. 5307.
Das, N.K. 6500.
Das, O.P. 4224.
Das, P. 5043.
Dasari, G. 969.
Dasgupta, B.R. 7909.
Dasgupta, M.K. 6254.
Dash, M.C. 399.
Dash, S.C. 5504.
Dashak, W.V. 3704.
Dashunin, V.M. 4362.
Dastidar, S.G. 1827, 4363.
Datar, R. 8473.
Daudy, R. 5241.
Datta, N. 6423, 9337.
Datta, R. 3418, 5312, 8646.
Dattagupta, M. 2044, 4547.
Daub, M.E. 7901.
Daudin, J.J. 5342.
Daudy, R. 5241, 7813.
Daugulis, A.J. 155.
Dauvats, V. 4778.
Dave, J.M. 3696, 5346.
Dave, P.J. 4790.
Davey, K.R. 6867.
Davey, R.J. 5949.
David, C. 8348.
David, G. 7522.
David, H. 946.
David, M.B. 1230.
Davide, R.G. 7179.
Davidova, E. 3247.
Davides, R. C. 2843, 4507.
Davidson, B.A. 6744.
Davidson, E.W. 1845, 6989, 6914, 6917.
Davidson, I. 4153.
Davidson, J.L. 2306.
Davidson, J.N. 430.
Davidson, P.M. 5728, 6450.
Davidson, S.K. 700.
Davidson, S.M. 6927.
Davidson, W.S. 8634.
Davies, B.I. 3092.
Davies, B.I. 3092.
Davies, D.L. 1968.
Davies, H.M.L. 7458.
Davies, J.A. 7025.
Davies, J.E. 5759.
Davis, A. 5929.
Davis, A.C. 704.
Davis, A.R. 6598.
Davis, B. 4922.
Davis, B.J. 6723, 7539.
Davis, B.K. 4203.
Davis, C.E. 2213.
Davis, C.P. 734.
Davis, D.W. 1199, 2852.
Davis, G. 3401.
Davis, G.R.F. 3731.
Davis, J. 6712.
Davis, J.D. 8202.
Davis, J.R. 2464, 7191.
Davis, L. 3435.
Davis, M.J. 280, 6240.
Davis, M.K. 7501.
Davis, P. 1335.
Davis, P.J. 7117, 8433.
Davis, R.B. 5019.
Davis, R.E. 281, 1570, 2472, 3266.
Davis, S.G. 3742.
Davison, E.M. 740.
Davoust, D. 1414.
Davyranov, K. 6852.
Davy de Virville, J. 2795.
Dawadsh-Shreini, V.C. 8103.
Dawkins, H.C. 8429.
Dawood, A.E.A. 7064.
Dawson, D.J. 578.
Dawson, G.W. 5401.
Dawson, J.E. 787.
Dawson, J.H. 7773.
Dawson, J.O. 3959, 4600.
Dawson, K.A. 1317, 2197, 3033, 5711, 8295.
Dawson, M.K. 2228.
Dawson, M.J. 5255.
Dawson, P. 5605.
Dawson, W.O. 309, 4024, 7931, 8332.
Day, A. 5296, 7872.
Day, A.W. 6221.
Day, D.F. 167, 8548.
Day, D.L. 4108.
Day, J.M. 8967.
Day, M.J. 2406, 5069.
Day, S.E.J. 7624.
Dayan, M.P. 7150.
Daykin, M.E. 8006.
Dazzo, F.B. 3953, 4657, 6347, 6358, 9004.
De A. Moraes, T.S. 5594.
De Almeida Cunha, B.C. 8535.
De Almeida, R.G. 3340.
De Andrade, R.P. 7932.
De Aquino Pereira, S.F. 1731.
De Arraga, D. 2620, 3454.
De Arriola, M.C. 7515.
De Azevedo Carneiro, J. 4226.
De Baere, L. 4102.
De Baere, L.A. 6693.
De Barjac, H. 127, 6089, 6913.
De Bedout, G. C. 2535.
De Boer, P.H. 5100.
De Bertoldi, M. 2121, 6682.
De Boer, M. 7628.
De Boer, G. 8934.
De Bot, P.H. 991.
De Bracalenti, B.J.C. 5368.
De Buzza, M.L. 1942.
De Cabral, S. 5272.
De Caloni, I.B. 7859.
De Castro, A.C.D. 6813.
De Cleene, M. 5447.
De Clercq, E. 465, 4027, 4766, 4772, 5184, 5747, 9130.
De Cook, R.M. 4282.
De Conick, K. 2147.
De Datta, S.K. 414, 3965.
De Figueroa, L.L. 4406, 5925, 8637.
De Flora, S. 5916.
De Flores Siquiera, L.F. 3340.
De Graaf, F.K. 2688.
De Graaf, J. 3125.
De Greef, M. 5442.
De Gunzburg, J. 7723.
De Haast, J. 3197.
De Haven, E. 599.
De Jager, F. 7530.
De Jesus, A.E. 4469, 4470, 4471.
De Jong, C. 3806.
De Jong, E.W. 2543.
De Jong, G. 5300.
De Jonge, S. 5904.
De Jongh, S. 863, 8171.
De Kloet, S.R. 8492.
De Kock, M.J. 8171.
De la Cochetiere-Collinet, M. 4212.
De la Maza, L.M. 650, 690, 1663, 1670, 2460, 3317, 5079.
De Lencastre, E. 3320.
De la Torre, M. 1714.
De Laat, A.M.M. 2060, 2061.
De Lacy, K.M. 2727, 2728.
De Laude, P. 4660.
De Leal, E.L. 1784.
De Leon, R. 5272.
De Ley, J. 4531, 5219, 5447.
De Macias, M.E.N. 6848.
De Mancilla, I.L. 5302.
De Mattos Guaraldi, A.L. 5909.
De Meo, G. 9136.
De Michels, M.I. 8741.
De Micheo, F. 5272.
De Miguel, E. 7728.
De Milliano, W.A.J. 2877, 7959.
De Mot, R. 8546.
De Nadar, M.C.M. 6648.
De Oliveira Lima, E. 4781.
De Oliveira, C.M. 8540.
De Paula, C.R. 2399.
De Pedro, M.A. 3441.
De Ponti, O.M.B. 1177, 8893.
De Richard, M.F. 4406, 5925, 8637.
De Rosa, M. 76.
De Rosa, S. 9128.
De Ruiz Holgado, A.A.P. 6848.
De Saad, A.M.S. 6848.
De Savigny, D. 1587.
De Sequiera, O.A. 5451.
De Silva, M.I. 3286.
De Silva, S.H.G. 2398.
De Souza Tosti, M.S.E. 1729.
De Stefano, S. 9128.
De Torres, R. 4012.
De van Broock, M.R. 4406, 5925, 6108, 8637.
De Visser, R. 2972.
De Voigt, M. 3203.
De Vos, G.F. 7336.
De Vos, P. 5219.
De Vries, F.W. 8296.
De Vries, G.E. 3956.

Author Index

- De Vries, K. 2533.
De Waard, M.A. 2843, 8296.
De Waal, L. 5442.
De Wilde, M. 2327, 6631.
De Wit, P.J.G.M. 2843, 5465.
De Wolff, F.A. 2735.
Dea, D.K. 864.
Dea, S. 6737, 7563.
Deacon, J.W. 264, 5557.
Dean, A.C.R. 5690.
Dean, J.L. 1124.
Dean, H.B.A. 2887.
Debari, M. 4720.
DeBenedetto Silva, C.H. 7619.
Debono, M. 4870.
Debruyckere, M. 7514.
Debus, D. 6136.
DeBusk, T.A. 6396.
Deby, G. 647.
Deck, F.H. 1943, 1944.
Deckers, T. 5443.
Dedryver, C.A. 5230, 5231.
Dedyukhina, E.G. 1063, 3728, 6925.
Deery, J. 2477.
Deerma, N. 4505, 8773.
Deen, G. 9269.
Dees, C. 4965.
Deetz, T.R. 7526.
DeG, C. 4997.
DeGorost, A. 1347.
DeGorges, L. 5768, 6541.
DeFranco, L.M. 779.
Degener, J.E. 4004.
DeGirolami, P. 4825.
DeGirolami, P.C. 3049, 7572.
Degtva, G.K. 8608.
Degtyarev, V.A. 6952.
Daguchi, H. 4393.
Daguchi, K. 1393.
Deiana, P. 990, 993.
Deitsunian, K.M. 3227.
Deio, S. 4339.
Dekker, E.E. 1789.
Dekker, R.F. 1808.
Dekker, R.F.H. 5184.
Dekkens, R.M. 6140.
Dekker, C. 2231.
Deklewa, M.L. 3326.
Del Arco, A. 2624.
Del Carmen Mateos, R. 4049.
Dela Cruz, Y. 7162.
Delaney, G.M. 5242, 5243, 6099, 6101.
Delaney, R. 8831.
Delarue, F. 6145.
Delatour, C. 5309.
Deleersnyder, H. 2251.
Deleuw, G.T.N. 3845.
Delera, A. 3177.
Delezon, C. 148.
Delfino, J.J. 564.
Delibes, A. 8078.
Dell, A. 870, 1828, 4367, 5390.
Della Bruna, P. 7122, 8744.
Della Bruna, C. 334, 2274.
Della-Latta, P. 713.
Dellarico, M. 2175, 2671.
Dellavalle, G. 6226.
Dellepiane, E. 4652.
Delweg, H. 6136.
Delmas, C. 7004.
Delmer, D.P. 4359.
Delort-Laval, J. 1715.
Delp, C.J. 1218.
DeLuca, M. 23, 3482.
DeLuca, M.A. 8564.
DeLuca, A.J. 6105, 6913, 7109.
Delzer, J. 4065.
Demail, A.L. 100, 220, 1375, 3097, 4137, 4401, 6094, 6522, 7652, 8353, 8381.
Demail, L. 2533.
Demange, P. 870.
Demars, D.J.E. 8960.
Demarta, A. 4700.
Dematie, J. 9249.
Demchick, P.H. 1593.
Demidkina, T.V. 4269.
Demmerov, K. 2618.
Demuyck, M. 6395, 7639.
Den Blanken, J.G. 7500.
Denac, M. 4118.
Denarie, J. 4860.
Donat, J.P. 6692.
Deneer, H.G. 3027.
Deng, M. 5010.
Deng, M.Y. 9277.
Deng, R.-L. 7392.
Denis, F. 5053.
Denson, R.F. 7293.
Deniso, Yu. V. 966.
Denisova, T.S. 2193.
Denkiau, D. 4374.
Dennery, C.M. 4463.
Denner, W.H.B. 43.
Dennis, J. 1549.
Dennis, K. 662, 1572.
Dennis, P.J. 4211.
Dennis, S.M. 4204.
Dennstedt, F.E. 2464.
Denny, T.P. 426, 431.
Dent, J. 8343.
Denti, E. 2575.
Denton, M.S. 2337.
Deryakina, E.K. 7734.
Deryagin, N.I. 1913.
Deryagin, D.G. 5179, 6039.
Des Rochers, B. 6920.
Desai, B. 4715.
Desai, J.D. 3754, 8530.
Deschacht, W. 6731.
Deschamps, A.M. 3675, 4423, 5106.
Deschamps, F. 1721, 3445, 6891.
Deschatelets, L. 5220, 8632.
Deshmukh, S.K. 5648.
Deshpande, A.D. 1852.
Deshpande, M.V. 7633.
Desjardins, V. 102, 3451, 3484, 7750.
Deshpande, V.N. 3490.
Deshusses, J. 5955.
Desmarais, F. 8787.
Desrochers, M. 6874, 7728.
Desselerberger, L. 654.
Desrodras, C. 7686.
DeTar, J.E. 7997.
Desrosier, R.W. 3620, 6948.
Deuel, L.E., Jr. 4919.
Deutsch, J. 7793.
Deutscher, J. 8558.
Devaux, J. 4629.
DeVay, J.E. 4618.
DeVera, A. 59.
Devleeschouwer, M.J. 6777.
Devlin, V. 1549.
Devocht, M. 6693.
Devos, J. 6543.
Devriese, L.A. 3050, 3729, 6762, 7596.
Dewar, A.M. 1989.
Dewey, F.M. 4621.
Dewitt, S.L. 904.
DeWoskin, R.S. 3388.
DeWitt, M.A.M. 6165.
Dewsnun, D.H. 3090.
Dexheimer, J. 5555, 8199.
Dexter, J.E. 3737, 7890.
Dey, B.K. 2151, 2996, 6384.
Dez, S.K. 6283.
DeYoung, D.R. 1581, 1835, 9085.
Dzerys, M. 7949.
Dhanvantari, B.N. 3848.
Dhar, S.C. 7693.
Dhillon, G.S. 4329.
Dhillon, J. 7579.
Dhillon, M. 7955.
Dhiman, S.J. 8799, 8801.
Dhingra, K.G. 5677.
Dhingra, O.D. 1676.
Dholakia, P.M. 2205, 8736.
Dhople, A.M. 7584.
Dhulster, P. 106.
Di Bella, M. 3070.
Di Blasio, B. 3140.
Di Giambattista, M. 8376.
Di Gieria, M. 4087.
Di Lauro, R. 9204.
Di Lenna, P. 2010.
Di Nola, F. 6506, 6509.
Di Pietro, A. 567.
Diachun, S. 1103.
Diaconescu, A. 7900.
Dickens, J.W. 7020.
Dickinson, A.M. 9169.
Dickinson, C.H. 7253.
Dickson, E.T., Jr. 7372.
Dickson, K.L. 7497.
DiCosmo, F. 3060.
Diederberg, O. 1760, 5985.
Diederholm, H. 8448.
Diederichs, C. 8975, 8977.
Dietle, D.A. 8101.
Diekmann, H. 8612.
Diem, H.G. 2914, 4596, 4597, 6355, 8969.
Diener, T.O. 8861.
Dietrich, A. 1765.
Dietrich, S.W. 4323.
Dietzschold, B. 6632, 6639.
DiFederico, J.D. 1638.
Dighton, J. 5575.
DiGiano, F.A. 1475.
Digori, J.T. 445.
Digra, A. 6453, 7450.
Dijk, J. 7663.
Dijkhuizen, L. 997.
Dik, H. 2735.
Dichyuvener, A.A. 7743.
Dikuvener, A.A. 4335.
Dikhtyarev, S.I. 4513.
Dikshit, A. 9107.
Dill, C.W. 7038.
Dillberger, A.M. 7773.
Dilley, M.A. 2005.
Dillon, L.K. 4713.
Dionisio, R.C. 3550, 3551.
Dilworth, M.J. 3961.
Dimache, G. 2324.
Dimache, V. 2324.
Dimtina, J.E. 8886.
Dimitrakakis, M. 8454.
Dimmock, N.J. 8459.
Dimond, J.B. 3554.
Dimroth, P. 1791.
Ding, M. 2607.
Dinunno, F. 6536.
Dinor, A. 2892, 6284.
Diniz, F.R. 3472.
Dinus, R.J. 8187.
Dion, M. 5000.
Dion, P. 7131, 7217.
Dipon, P.N. 7179.
Dippe, H. 2447.
Diprosimo, V.P. 6206.
Dirar, H.A. 5288.
Dirchard, P.A.D. 32.
Dirheimer, G. 3362.
Dirwaechter, G. 3843.
Diriam, J.P. 4741.
Dirshof, T. 5889.
Dissanayake, C.B. 2398.
Dissanayake, M.G. 1472.
Disathaporn, S. 4520, 8100.
Dittich, W. 6362, 6363.
Dive, D. 7055.
Dive, G. 5985.
Diven, W.F. 8357.
Dixit, R.B. 2083.
Dixit, S.N. 5505, 9106.
Dixon, D. 2280.
Dixon, P.A. 1002.
Dixon, P.E. 2612, 7433.
Dixon, R.O.D. 2987.
Dixon, S. 2198.
Dizer, H. 561.
Dzikas, J.R. 5032.
Dmitrovska, T.V. 6066.
Dmitriko, G.I. 7879.
Dmitriev, B.A. 4362.
Dmitrovskii, A.A. 6486.
Dmitrovskii, A.A. 6491.
Do Nascimento Mos, E. 8468.
Do, D.D. 8550.
Doan, T.L. 4255, 4256.
Doane, F.W. 5881.
Doane, W.M. 8657.
Doobs, T.L. 8656.
Dobek, A.S. 7372.
Doberski, J. 3574.
Dobos, A. 1871.
Dobrova, Z. 4345.
Dobrovolskaya, T.G. 3954.
Dobranski, W.T. 2311, 4328.
Dobson, W.E. 2638.
Dochain, D. 6705, 8394.
Dochan, D.S. 2090.
Dodd, J. 1265.
Dodd, J.C. 6337.
Dodd, J.S. 7371.
Doddrell, D.M. 4066, 7463.
Dodds, J.A. 3821.
Doddrell, K.L. 6967.
Dodge, K.S. 189, 880.
Dodin, A. 8416.
Doehmer, J. 6597.
Doel, S.M. 2228.
Doel, T.R. 656, 6741.
Doel, H.W. 149.
Doemerz, S. 860.
Doepfle, T. 1739.
Doerner, E. 4960.
Doern, G.V. 685, 1625, 1638, 1649.
Doerr, M. 8519.
Dohi, Y. 7107.
Doiri, P.A. 8582.
Dojak, L.A. 2297, 4877, 5792.
Doiby, C.A. 6249.
Dolby, R. 8971.
Dolby, T. 2345.
Dolenc, D.A. 3655, 4106.
Dolig, L.M. 1287.
Doligova, L.G. 2146.
Dolman, M.M. 1597, 4173, 9294.
Domanski, S. 356.
Domarok, M.J.P. 557.
Domatsu, C. 9030.
Domek, M.J. 8417.
Domenech, A.M. 7289.
Domenech, E. 7817.
Dominguez Rodriguez, L. 4951.
Dommergues, Y. 4596, 4597.
Dommergues, Y.R. 2914.
Dommermuth, H. 6219.
Domok, E. 4984.
Domoroshchenko, M.L. 5089.
Domoroshchenko, M.L. 8485.
Domsh, K. 5680.
Donachie, W. 1631, 7488.
Donald, D.G.M. 7219.
Donaldson, S.J. 5557.
Donaldson, S.J. 5282.
Donatelli, I. 4149.
Donati, G. 2674.
Donati, M. 2476, 3234, 6734.
Donato, F. 5856.
Dow, A.W. 6334.
Dow, D. 631.
Donelli, G. 7531.
Donetz, A.P. 2418.
Donlan, R.M. 7499.
Donndelinger, C.R. 1089.
Donnelly, J.A. 3196.
Donnelly, F.K. 4919.
Dooley, H.L. 8950.
Doorey, S. 7030.
Doran, J.E. 514.
Doran, J.C. 4275.
Dore, M. 2371.
Doremus, M.G. 3558.
Dormont, D. 5983.
Dorner, J.W. 221, 6205, 8755.
Dorner, S.S. 6775.
Dorobai, O. 2488, 8293.
Dorofey, V.M. 7562.
Dorokhin, O.V. 4684, 4699.
Dorokhov, Yu.L. 8862.
Doronina, O.D. 3583.
Dorozhko, A.I. 7727.
Doroshenko, I. 1640.
Dose, R.H.L. 4950.
Dose, K. 7944.
Dorosetti, C. 8408.
Dorsonmu-Ogunbi, O. 709.
Dott, W. 2404.
Dostiz, J.E. 3162.
Doubel, R.S. 3503, 3518.
Doubel, R.S. 3503, 3518.
Dougherty, E. 125.
Dougherty, G.R. 4903.
Douglas, J. 7579.
Douglas, J.T. 5057, 5901.
Douglas, L.A. 2906, 2985, 2986, 2999.
Douglas, S.D. 721, 5065.
Dourado, A. 6138.
Dourado, G. 2849, 8078.
Dovantziz, K. 1461.
Dow, B.C. 1810.
Dowbenko, D. 6591, 6616.
Dowdell, J.R. 5671.
Dowdle, S. 408.
Dowd, V.R., Jr. 794, 1576, 1644, 1664, 2457.
Dowling, M.W. 7940, 7944.
Dowling, J.M. 7418.
Dowling, T. 2611.
Downes, M. 7512.
Downey, G.A. 5369, 5375.
Downing, M.M. 4759.
Doxtader, K.G. 4433.
Doyle, J.D. 8476, 9319.
Doyle, R. 1818.
Doyle, M.P. 4459.
Doyle, M.V. 8262.
Doyle, R.C. 7511.
Doyle, R.J. 700, 2491, 5042.
Drach, J.C. 6478.
Drachard, W. 267.
Drainas, C. 3591, 5267.
Drake, H.L. 7662.
Drake, S. 2211, 4009.
Drake, T.A. 478, 7343.
Draper, P. 9244.
Draper, R.K. 7121.
Draughton, F.A. 5987.
Drautz, H. 4873, 8372.
Draut, F. 133.
Dreesman, G.R. 4154, 6609, 6610.
Dressler, D.W. 7880.
Dreizen, S. 6730.
Dressler, E. 2791.
Drevon, J.J. 4664.
Drew, S.W. 518, 5805.
Drewns, G. 5989.
Dreyfus, B.L. 2914.
Drioli, E. 764.
Driscoll, W.S. 6728.
Driver, C.H. 8944.
Driver, M.H. 7343.
Drobnica, L. 6488.
Drobnik, J. 778.
Droby, S. 2822, 6284.
Drobyshch, T.N. 2133.
Drouet, H. 2052.
Drow, D.L. 2465, 3321.
Drozd, T.P. 8599.
Drozdov-Tikhomirov, L.N. 8512.
Drozdov, S.G. 4928.
Drozdowicz, A. 4658, 7272.
Dru, J. 424.
Drujan, G.L. 7431, 9186.
Dryden, P. 3782.
Drysdale, R.B. 7100.
Du Plessis, H.J. 7158.
Du, S. 3277.
Duan, D.-H. 8139.
Duan, S.-M. 467.
Duarte Formiga, L.C. 5909.
Duarte, A.C. 2352, 6697.
Duarte, J.M.C. 108, 3525.
Duax, W.L. 6834.
Dube, D.K. 8571.
Dubensky, T.W. 6744.
Dubey, S. 8247.
Dubey, A. 4782.
Dubey, N.K. 9107.
Dubey, V. 6744.
Dubey, G. 2319.
Dubey, F. 6542.
Dubinna, G.P. 8549.
Dubnau, D. 6427.
Dubourdieu, D. 4410.
Dubourguier, H.C. 8671.
Dubov, S. 4570.
Dubreux, M. 4549.
Ducate, M.J. 670.
Duck, P. 5269.
Duchenko, L.G. 1006, 6155.
Duddridge, J.A. 5573.
Dudley, S.S. 4246.
Dudek, E. 736.
Dudman, W.F. 2633.
Duermeier, W. 6748.
Duer, P. 4192.
Duerr, J.M. 5769.
Duffus, J.E. 1500, 3241, 8868.
Dugan, J. 7944.
Dufour, A.P. 4947.
Dugan, I.N. 912.
Dugan, P.R. 1311.
Dughi, M.H. 405.
Dugui, G. 7427.
Duhon, J.L. 8016, 8830.
Duhon, E. 3798.
Duliba, P. 1413.
Dulley, J.R. 22.
Dulmage, H.T. 1845, 6083, 6910.
Dumas, M. 366.
Dumas, M.T. 354, 3926.
Dumenil, G. 2641.
Dumler, J.S. 2326, 2471.
Duncan, K. 7714.
Duncan, T.M. 898.
Dunez, J. 8451.
Duncan, L.K. 3662.
Dungan, E.P. 5674, 7140.
Dunkle, L.D. 4519.
Dunkle, L.M. 7599.
Dunlap, R.B. 8575.
Dunleavy, J.M. 248, 7937.
Dunn, G. 5510.
Dunn, J.I. 4118, 6119, 6703.
Dunn, P.E. 5211.
Dunne, C.P. 87.
Dunnill, P. 1600, 3426, 6048.
Dunning, A. 7190.
Dunne, G.M. 430.
Dunstan, T.G. 1493.
Duong, T.-V.C. 100.
Dupler, M. 2897, 8227.
DuPont, H. 437, 563, 1961.
Dupont, H. 433, 9309.
Dupuy, F. 194.
Dupuy, P. 35.
Durakovic, S. 2758.
Duran de Bazua, C. 7510.
Duran, A. 2223.
Duran, R. 4517.
Durand, A. 1716, 6546.
Durand, P. 247, 4998.
Durand, H. 6008.
Durand, R. 2527.

- Egan, R. 2247.
Eganyan, E.R. 7454.
Egawa, H. 7364.
Elgerde, J. 2422.
Egger, R. 2206.
Egorov, N.S. 519, 5878.
Egorkin, G. 3988.
Egli, D.B. 8778.
Eglington, A.J. 6579.
Egorov, A.M. 5144, 5170, 5997.
Egorov, A.A. 4405, 4417, 5171, 7813.
Egorov, N.S. 519, 518, 1403,
1819, 1857, 4033, 4879, 5974,
6029, 6573, 6882, 8583, 8615.
Egorova, L.A. 6881.
Eguchi, C. 3438.
Eguichi, Y. 8513.
Eguizazu, G.M. 216.
Ehlers, N.L. 2254.
Ehlers, J.G. 5362.
Ehlers, U. 4538, 8440.
Ehrenspurger, F. 1452.
Ehret, W. 2561.
Ehrig, A. 2411.
Ehrydala, G.R. 1506, 1514.
Dyk, P.L. 8907.
Dye, D.W. 3776.
Dyke, G.V. 2900.
Dyer, R.M.P. 1246.
Dyes, J. 2717.
Dysinger, M. 7486.
Dzagurova, S.G. 7480.
Dzugurova, T.K. 7570, 8455.
Dzhemukhadze, G.K. 8306.
Dzhusupova, D.B. 2700.
Dziurkowska, D. 2271.
Dzimil, I. 9188.
Dziedziczy, N.V. 6951.
- Eady, T. 3704.
Eadie, E.A. 2258.
Eads, J. 2604.
Eaglesham, A.R.J. 2155, 5664, 9013.
Eaks, I. 2000.
Eandi, M. 6508, 6509.
Earle, D.E. 1783, 7910.
Earis, J.C. 9338.
Earls, R.F. 1377, 2477, 5752.
Easter, M.K. 1636.
Eastman, C.E. 4557, 8020.
Easton, C.J. 6529, 6530, 9161.
Easton, D.G. 8926.
Eaton, D.L. 8885.
Eatson, R.W. 7828.
Ebber, M.H. 1218.
Ebel, J.P. 1765.
Eberbach, P.L. 2995.
Eberhard, R. 5984, 5988.
Eberle, E. 6971.
Ebert, J.W. 472.
Ebina, T. 3233.
Ebisawa, I. 3691.
Ebizuka, Y. 6570.
Ebrahim-Nesbat, F. 2785.
Echandi, E. 4583, 8113.
Echemendia Font, M. 4721.
Echeverria, P. 1087, 2767.
Eckardt, K. 523, 533.
Eckart, V. 8274.
Eckenfelder, W.W., Jr. 4113.
Eckert, J.W. 1167, 2821.
Edwards, T. 4039, 5764.
Eckles, A.J. 7808.
Eckstein, F. 895.
Ecobichon, D.J. 2434.
Economou-Stamatopoulou, C. 4136.
Edberg, S.C. 1794, 2249, 2275.
Edel, B.S. 5050.
Edebo, L. 4972.
Edelstein, P.M. 785, 789, 3336.
Ederer, M.N. 4714, 5778, 7586.
Edgar, J.A. 725, 1425, 3735.
Edgenhill, R.J. 559.
Edmonds, L.T. 8297.
Edmonds, M.-B.K. 8445.
Edmonds, R.L. 3945, 8488, 8944.
Edmondson, R.A. 7433.
Edson, D.C. 4888, 4978.
Edson, R.S. 432.
Edwards, E.A. 493.
Edwards, F.F. 1529.
Edwards, G.L. 3193.
Edwards, L.D. 7805.
Edwards, M.C. 8484.
Edwards, M.L. 1238.
Edwards, R.L. 5246.
Edwards, R.T. 9307.
Edwards, W.B. III. 6149.
Edwardson, J.R. 8825.
Enenik, A.H. 308.
Effenberger, W. 4872.
Efron, Y. 8895.
- Eiazhy, M.A.S.Y. 6737, 7563.
Elder, B.L. 1621.
Eldred, J.H. 3539, 6749.
Eldridge, B.J. 8805.
Eley, A. 6154, 8354.
Elegasma, D.M. 7200.
Elin, J.H., Jr. 5499.
Ellie, S. 4531.
Ellis, C. 7368.
Eliizer, E.D. 7809.
Elin, R.J. 3106.
Ellon, G.B. 4877.
Ellonsky, G.M. 428, 444.
Ellor, J.H., Jr. 4697, 4742.
Elisaashvili, V.I. 4365, 7764.
Elischero, K. 895.
Elkins, J.R. 3914.
Elkins, N.Z. 6392.
Elenskaya, I.A. 1078.
Ellar, D.J. 1397, 5387.
Eller, K.I. 1076.
Ellery, W.N. 9305.
Ellestad, G.A. 3153, 3154.
Elms, G. 5589.
Elmirk, N. 3469.
Elliot, C.J. 2415.
Elliott, A.M. 1382.
Elliott, E.T. 5668.
Elliott, G.T. 448, 8335.
Elliott, L.F. 2689, 6242, 7300.
Elliott, T.S.J. 7451.
Ellis, D.S. 5004.
Ellis, M.A. 339, 7214, 7986, 8846.
Ellis, T.M. 4811.
Ellis, W.R. 4641.
Elmer, P.D. 1609, 3284.
Elmer, T. 5863.
Elmendorf, D.L. 6707.
Elmstrom, G.W. 2848, 3826, 8905.
Elmagar, S. 3571.
Elmahsa, S.S.E.H. 4356.
Elmhalm, E.I. 7370.
Elmhalm, M.A. 4356.
Elmsayed, R.A. 3071.
Eltager, E.F. 8304.
Elmore, R. 1297.
Elson, A. 3098.
Emanuelov, E. 6035.
Emenezay, M. 2450.
Emberger, O. 202.
Emborg, C. 5370, 9183.
Emn, M.A. 8291.
Emerich, D.W. 1653.
Emerson, S.L. 1479.
Emmett, G.H. 5299, 9680.
Emuruwa, A.C. 2220.
Emody, L. 7316.
Emswiler-Rose, B. 8721.
Enari, T.-M. 2599, 5951, 6107.
Ende, I.A. 1086.
Enders, E. 6247, 8810.
Endo, I. 3630.
Endoh, K. 8511.
Enerson, P.M. 1180.
Enfors, S.-O. 6028.
Enfors, S.O. 678.
Eng-Wilmot, D.L. 8521.
Eng, C. 1417, 3114.
Eng, J. 783.
Eng, R.H.K. 445.
Engasser, J.-M. 961, 984, 5111, 5237.
Engesser, J.M. 105, 3473, 5967.
Engbro, B. 8910.
Engel, P.C. 3460.
Engelbrecht, J.F.P. 2367.
Engelbrecht, R.S. 2372.
Engelhardt, A.W. 4537, 4550, 6273.
Engelhardt, G. 4444.
Engelhardt, R. 930.
Engelmarm, R. 8558.
Enger-Valk, B.E. 6605.
Engst, R.F. 7123, 8749.
Englande, A.J. 1284.
Englemann, G. 751.
English, A.R. 3121, 3123, 3158.
Engstrom, J.A. 3510.
Enoki, A. 3662.
Enokita, R. 2322, 3567.
Enriquez, A. 4353.
Ensley, B.D., Jr. 7825.
Enterline, J.C. 5039.
Entwistle, A.R. 6312.
Eoyang, L. 1795.
Eppler, A. 6280.
Eppstein, D.A. 3065, 6480.
Epstein, E. 4082.
Epstein, L. 2828, 8966.
Epton, H.A.S. 5721.
Eran, H. 2807.
Erasmus, D.S. 263, 2789, 2790.
Era, V. 4860.
Ericlan, G.L. 1151.
Erjal Akalin, H. 2195.
- Erman, A.E. 3359.
Erman, Y.J. 5482.
Erel, Z. 2672, 3543.
Erlic, J.D. 9035.
Ergan, F. 1068.
Erge, D. 968, 8135.
Erkun, W.O. 6484.
Erko, B.E. 5126.
Erickson, L.E. 798, 800, 3678, 9304.
Erickson, R.C. 1389.
Ericsson, D.M. 1961, 9309.
Ericsson, T. 4610.
Ericsson, B. 6472.
Ericsson, C. 7357.
Eriksson, K.-E. 878, 931, 1010, 1886, 2705, 7833.
Eriksson, K.E. 4436.
Eriqnez, L. 720.
Eriqnez, L. 2290.
Erl, I. 115, 8068.
Erkin, S. 2018.
Erkenbrecher, C.W. 6399.
Erkin, E. 1844.
Ermenchenko, V.A. 7355, 8306.
Ernst, A. 4765.
Ermolov, O.B. 493.
Ernst, E.G. 7668.
Ernst, J.D. 8365.
Ernst, K. 4065.
Ernstroth, C.A. 2731.
Ernst, T. 4371, 5118.
Ernst, G. 6062.
Eroschin, V.K. 214, 1063, 3728.
Ersek, T. 319.
Ertola, R. 1951, 7786.
Erwerth, W. 6722.
Erzikian, L.A. 3227.
Esaki, N., T. 65, 4311, 5151, 6646, 8517.
Escalante-Semerena, J.C. 4681.
Escamilla, J. 1579.
Esch, F. 8555.
Eschbacher, A. 8071.
Escoula,

Author Index

- 10

- Gladi, M.P. 7314.
 Glomon, C. 105.
 Glover, D.V. 8083.
 Gloyna, E.F. 4896.
 Gobelmann-Werner, K.S. 7937.
 Gobenado, M. 537.
 Gobin, G. 5016.
 Gochenauer, S.E. 5540, 6319, 8959.
 Godbout, C. 5927.
 Godeas, A.M. 3906.
 Godfred, J. 5229.
 Godfrey, A.J. 4696, 7349, 9081.
 Godfrey, B.E.S. 184.
 Godfrey, E. 623.
 Godfrey, T. 40, 48, 52, 53, 54, 56, 57, 58, 163, 180, 200, 213, 547, 839.
 Godley, M.J. 5914.
 Godoy, G. 2937.
 Godoy, J.E. 7515.
 Godshall, M.A. 7109.
 Godsy, E.M. 5815.
 Goetz, F. 8584.
 Goebbert, U. 5221.
 Goebel, W. 4297.
 Goeksefied, M.O. 5509.
 Goel, L.B. 2054.
 Goel, S.C. 3581, 4413.
 Goering, R.V. 515.
 Goeritz, D.F. 5815.
 Goessens, W.H.F. 6418.
 Goeth, H. 9079.
 Goetz, A. 7528.
 Goetz, F. 8584.
 Goetzdoerfer, C. 3755.
 Gogarty, A. 7573.
 Goh, K.M. 8145.
 Gohlwar, C.S. 5970.
 Golan-Goldhirsh, A. 2594.
 Gold, M.H. 3662, 3663, 6861.
 Goldberg, B.S. 208.
 Goldberg, M. 3623.
 Goldberg, R.B. 4243.
 Goldblatt, L.A. 7049.
 Goldblum, A. 7793.
 Goldblum, R.M. 7038.
 Goldman, A.I. 8323.
 Goldman, A.S. 7038.
 Goldman, D.J. 3488.
 Goldman, P. 2312, 3053.
 Goldmann, D.A. 8361.
 Goldmintz, D. 5364.
 Goldsby, A.J. 7781.
 Goldschmidt, Z. 2076.
 Goldsmith, S. 6686.
 Goldstein, F.W. 4687, 4792, 8291.
 Goldstein, G. 9127.
 Goldstein, J. 73, 730, 1318, 1588.
 Goldstein, L.C. 601.
 Golik, J. 2303.
 Golinski, P. 225, 1079.
 Golley, F.B. 2911.
 Golimick, F.A. 956.
 Golobachova, E. 7301.
 Golovinsky, E. 2319, 8302.
 Golovko, E.A. 4636.
 Golovlev, E.I. 912, 4309, 6870.
 Golovleva, L.A. 1008, 4440, 6152, 9024.
 Golovnya, R.V. 1046.
 Goluk, E. 5070.
 Golubeva, L.I. 6866.
 Golubiatnikov, R. 9103.
 Golubkova, L.S. 9155.
 Golubev, C.G. 3189, 5839.
 Goma, G. 1307, 3547, 3614, 5969.
 Gombas, D.E. 6415.
 Gombert, M.E. 480.
 Gombos, Z. 4220.
 Gomes Oliveira, T.J. 4377.
 Gomez-Garcia, A.C. 9100.
 Gomez-Hernandez, J. 10.
 Gomez-lus, R. 537.
 Gomez, G. 1709.
 Gomez, R.L. 1499.
 Gomez, P.L. 8097.
 Gommam, A.M. 9142.
 Gombay, A.R. 6050.
 Gombol, E. 4072.
 Gonde, P. 8955.
 Gondo, S. 112, 3467, 3531.
 Gong, C.-H. 4992.
 Gong, C.-S. 3622, 3656.
 Gong, C.S. 3651.
 Gong, L.-Y. 7170.
 Gong, Y.-X. 7485.
 Gong, Z.-X. 7182.
 Gonsalves, D. 3818, 6269, 8039, 8110.
 Gonsalves, G.D. 7994.
 Gonsior, S.J. 7836.
 Gonsior, S.J. 185.
 Gontijo Filho, P.P. 6946.
 Gonzalez, R.T. 2093.
 Gonzalez Pacheco, M. 5383.
 Gonzalez-Lopez, J. 1266.
 Gonzalez-Martinez, S. 8402.
 Gonzalez, C. 433.
 Gonzalez, J.R. 2094.
 Gonzalez, L.F. 801.
 Gonzalez, M.A. 3511.
 Gonzalez, S. 4632, 7510.
 Gonzalez, J. 9095.
 Gooch, W.M. III. 732, 4805.
 Good, F. 7323.
 Good, R.C. 1405.
 Good, S.S. 2435.
 Gooday, G.W. 4308, 8619.
 Goodbody, S. 8007.
 Goodchild, J. 4768.
 Goodell, J.J. 4500.
 Goodriches, R.A. 7342.
 Gooding, A. 2198, 4841.
 Goodman, A.E. 2694, 4415, 7795.
 Goodman, J.F. 6564.
 Goodman, L.J. 736, 4744.
 Goodman, N.L. 807, 1660.
 Goodman, R.M. 1973.
 Goodman, R.N. 1835.
 Goodman, T.G. 3327.
 Goodroad, L.L. 7274, 7285.
 Goodwin, J. 6466.
 Goodwin, J.M. 5283.
 Goossens, H. 7628.
 Goopitz, T.D. 6417.
 Gopal Rao, K.R. 7037.
 Gopala Gowda, H.S. 2776.
 Gopalakrishnan, C. 4783.
 Gopinath, R. 8137.
 Gorbach, S.L. 229, 6211, 7348.
 Gorbacheva, I.M.V. 917.
 Gorbet, D.W. 7945.
 Gorbik, L.T. 860.
 Gorbey, E.W. 6422.
 Gorden, D.A. 9333.
 Gordenko, N.M. 7562.
 Gordin, S. 192.
 Gordiyenko, A.S. 6802.
 Gordon, A. 6766, 9306.
 Gordon, A.J. 2957.
 Gordon, A.S. 3273.
 Gordon, D.T. 6977.
 Gordon, J.C. 2915, 8159.
 Gordon, J.M. 5753.
 Gordon, L.K. 6655.
 Gordon, P.H. 7505.
 Gordon, R.F. 2706.
 Gordon, S.C. 2065.
 Gordon, T.R. 7981.
 Gordts, B. 5028, 9179.
 Goren, T. 5148.
 Gorenfeld, J.C. 4914.
 Goretova, O.V. 5287.
 Gorin, P.A.J. 2632.
 Gornstein, S. 7793.
 Gornenko, M. 1021.
 Gorman, G.W. 5039.
 Gornowicz, P. 1340, 1362, 5738.
 Gorkosskaya, Y.I. 477.
 Gornichon, J.P. 9141.
 Gornis, M.T. 334.
 Gorr-Alman, C.P. 3735, 3744, 4471.
 Goss, M.J. 1265.
 Goss, N.H. 7698.
 Gossett, J. 2376.
 Goswami, B. 5758.
 Goswami, B.N. 5521.
 Goswick, C. 9221.
 Goto, R.W. 8094, 8491.
 Goto, S. 2316.
 Goto, T. 8235, 8371.
 Gotoh, A. 5165.
 Gotoh, N. 9216.
 Gottardi, W. 1507.
 Gottfreud, J. 8386.
 Gottlieb, H.E. 7833.
 Gottschalk, G. 859, 8648.
 Gottschalk, M. 8648.
 Gottwald, T.R. 272, 5263, 5446.
 Goutda, A. 9264.
 Gouda, S. 8316.
 Goudard, M. 5739.
 Goudreau, J.R. 6607.
 Gould, J.M. 3476, 3652, 5303.
 Gould, S.J. 4844, 6569.
 Goulet, J. 5862, 6969.
 Goulet, P. 8856, 8557.
 Goutier, K.C. 8014.
 Goutly, L.G. 1308.
 Gouriérier, F. 181, 4616.
 Goussinault, G. 2795.
 Govan, J.R.W. 950, 8618.
 Govers, F. 2981.
 Govindaraj, V.A. 1412, 6025.
 Gowda, T.K.S. 3261.
 Gower, J.L. 4831.
 Gowiand, P.C. 7337.
 Goyal, R. 8049.
 Goyal, S. 2393.
 Goyal, S.L. 7491.
 Goyal, S.M. 2431, 4954, 5852, 7526, 9242.
 Goyat, J.P. 2182.
 Grabow, W.O.K. 2394, 2396, 4943.
 Gracey, M. 2767, 8412, 8414.
 Gracheck, S.J. 8680.
 Grachev, V.P. 2433.
 Gracia, D. 234, 5652.
 Gracioli, L.A. 5853.
 Gradlin, J.L. 3056.
 Gradwohl, S.E. 5850.
 Grady, C.P.L., Jr. 587, 1035.
 Graele, U. 965, 6068, 6572, 7470.
 Graessmann, A. 630.
 Grafe, U. 116, 4799.
 Graham, B.D. 2638.
 Graham, H. 6953.
 Graham, H.E. 9154.
 Graham, J.H. 1136, 8216.
 Graham, R.A. 1271, 2982, 2983, 9000.
 Graham, R.D. 8099.
 Grahame, D.A. 6945.
 Graikoski, J.T. 5364.
 Graillie, J. 872, 3749.
 Grainger, J.M. 545, 911, 1457.
 Grambow, H.J. 250.
 Grams, G. 353.
 Granade, T.C. 516, 1336.
 Granados, R.R. 6901.
 Granata, F. 6507.
 Granberg, K. 2388.
 Grant, C.W. III. 1234.
 Grande, H. 2608.
 Grandien, M. 3236.
 Granell, A. 3248.
 Granet, C. 7516.
 Grant, F. 3478.
 Grant, J.W. 2059.
 Granger, P. 4092.
 Granger, R.L. 7131.
 Granhall, U. 4610, 9014.
 Granich, G.G. 4861.
 Grant, S. 8697.
 Granit, A.L. S. 8743, 8809.
 Granoff, D.M. 3412.
 Grant, B.R. 3912, 8170.
 Grant, C. 9176.
 Grant, L.D. 3388.
 Grant, L.D. 6151.
 Grant, S.F. 4758, 6510.
 Gras-Masse, H. 9219.
 Grasmick, A. 6870.
 Grasmick, A.E. 3308.
 Grasso, G.M. 3094.
 Grant, C.R. 1120.
 Grau, F.H. 8659.
 Graumlich, T.R. 6102.
 Gravani, R.B. 6982, 7356.
 Grave-Prado, M. 5911.
 Graves, D.A. 8858, 9297.
 Graves, L.M. 1064.
 Graves, S. 7332.
 Gravitt, R.T. 6621.
 Gray, B.M. 1584.
 Gray, D.J. 362, 4550.
 Gray, E.D. 1662.
 Gray, G.C. 5244.
 Gray, G.D. 2298.
 Gray, G.R. 5203.
 Gray, K.G. 1511.
 Gray, L.E. 1202.
 Gray, M.J. 2419.
 Gray, N.C.C. 1878.
 Grist, N.R. 1414.
 Grylls, 9892.
 Grylls, S.J. 8350.
 Graybill, J.R. 8364.
 Grayston, S.J. 2201.
 Grazia, L. 6200.
 Graziani, G. 9729.
 Graziano, T.H. 8241.
 Grbic-Galic, D. 190.
 Greaves, M.P. 4673.
 Greber, R.S. 1968.
 Grechushkina, N.N. 8615.
 Greco, D. 4940.
 Greco, G.J. 893.
 Greco, M. 6405.
 Greco, R.S. 2418.
 Greed, C.L. 7327, 9066.
 Green, C.F. 7953.
 Green, E.J. 2662.
 Green, M.H.L. 5914.
 Green, N.B. 6519, 6528.
 Green, N.E. 5615.
 Green, S.M. 5255.
 Greenbaum, E. 5161.
 Greenberg, H. 4165, 6599.
 Greenberg, N. 6482.
 Greene, R.V. 6627.
 Greene, R.V. 3476.
 Greene, S.L. 7895.
 Greenfield, L. 742, 7119.
 Greenfield, P.F. 149, 158.
 Greengrass, C.W. 6534.
 Greenhalgh, F.C. 6301.
 Greenhalgh, R. 2755, 3737.
 Greenham, L.W. 1538.
 Greenhood, G.P. 1503.
 Greening, R.C. 6825.
 Greenland, A.J. 2109, 5424.
 Greenman, J. 4725.
 Greenwood, D. 5726, 6466, 6514.
 Greenwood, J.R. 793.
 Greig, A.T. 4227.
 Gregg, C.T. 3232.
 Gregoire, L. 2448.
 Gregory, B.E. 4865.
 Gregory, L.V. 7971.
 Gregory, S.V. 999.
 Grehaigne, B. 3749.
 Grehn, L. 6472.
 Gressel, J. 2711, 7819.
 Gresser, M.E. 7809.
 Gresshoff, P.M. 2977.
 Grethlein, H.E. 5160.
 Greve, L.C. 5117, 5121.
 Grewal, J.S. 1974, 3788.
 Grewell, C.M. 5038.
 Grey, W.E. 5428.
 Gribova, N.V. 4701.
 Gridley, H.E. 3865.
 Gridnev, V.A. 6430.
 Grier, N. 1356, 1357.
 Grieve, D.B. 3723.
 Grieve, P.A. 22.
 Griffin, C.W. III. 3075.
 Griffin, D.H. 8174.
 Griffin, G. 3914.
 Griffin, H. 3472.
 Griffin, M.R. 704.
 Griffin, P. 1303.
 Griffin, T.K. 5751.
 Griffin, W.M. 5705.
 Grifflini, A. 3059.
 Griffith, I.P. 1753.
 Griffith, O.M. 642.
 Griffiths, W.L. 5258, 5259.
 Griffiths-Smith, K. 4293.
 Griffiths, E. 302, 1196, 5432.
 Griffiths, M.W. 1911.
 Griggs, A.A. 2379.
 Griggs, M.M. 8187.
 Grigolo, B. 5131.
 Grigorova, G. 1306.
 Grigorova, S.P. 5086.
 Grigorov, V.G. 2319.
 Grigoryan, E.G. 7398.
 Grigoryeva, T.Y. 6952.
 Grigoryeva, V.M. 493.
 Grin, L.K. 642.
 Grinn, S.P. 9125.
 Grillo, C. 567.
 Grimes, D.J. 4131, 4961, 6711.
 Grimes, H.D. 5658.
 Grimmer, D. 5683.
 Grimmer, S. 7332.
 Grimmer, R.T. 270, 342, 848.
 Grinberg, T.A. 5198, 8054.
 Grinbergs, A.P. 8407.
 Grinda, M. 7243.
 Grindal, R.J. 571.
 Grinnell, V. 8426.
 Grinnell, V.I. 5089.
 Grischy, R.O. 4207.
 Grisebach, H. 2782, 5507.
 Grisham, M.P. 282, 1127, 1155.
 Grishchenko, V.G. 1008.
 Grist, N.R. 1414.
 Grishin, L. 3688.
 Grobbelaar, N. 4667.
 Grobstein, D. 25.
 Grodzinsky, A.M. 4636.
 Groeger, D. 968.
 Groen, G. 6849.
 Groenewold, R. 308.
 Groeschel, D.H. 1580.
 Grogan, R.G. 313, 1164, 4565, 5532, 8845.
 Grohmann, K. 7806.
 Groblau, D. 5223, 7782.
 Groman, N. 375.
 Gromova, L.A. 2181.
 Gronowicz, J.S. 594.
 Grootuith, D.G. 3333.
 Grotwassink, J.W.D. 7745.
 Groppi, M.T. 8501.
 Grose, M.J. 5986.
 Gross, D.C. 2804.
 Gross, H.L. 5602, 8179, 8180, 8946.
 Gross, K.C. 7125.
 Gross, M.L. 5024.
 Gross, S. 131, 3564.
 Grosse, S. 580.
 Grossebacher, H. 1012, 2698, 4426, 7834.
 Grossebauer, K. 2524.
 Grossman, D. 3299.
 Grossman, D.M. 6495.
 Grossman, F. 2869.
 Grossman, L. 841, 842.
 Grossman, S. 913.
 Grossmann, F. 3886, 7761.
 Grossnickle, C.S. 5547.
 Grosz, R. 588.
 Groth, J.V. 2780.
 Groth, V. 2950.
 Groudev, S.N. 8261.
 Groudeva, I.Y. 8261.
 Grove, G.G. 7214.
 Grove, J.F. 6926.
 Grover, R.K. 7211.
 Groves, D.J. 5545.
 Growich, J.A. 6889.
 Groynne, F. 2327.
 Grubb, W.B. 7327, 9066.
 Grube, M. 7951.
 Grueneberg, R.N. 9158.
 Gruffydd, R.C. 2686.
 Gruff, H. 3043.
 Grula, E.A. 3987.
 Grula, M.M. 3987.
 Gruenwaldt-Stecker, G. 1995.
 Grunzina, V.D. 2268.
 Gryczan, J. 6427.
 Gryzbowski, J. 1429.
 Gschwend, K. 802.
 Gualerzi, C. 2562.
 Guarnieri, J.J. 713.
 Guarnieri, N. 9118.
 Guarro, J. 6336, 8980.
 Guay, E. 6779.
 Gubler, W.D. 313.
 Gubinsky, L.S. 6877.
 Gudmestad, N.C. 2820.
 Guenther, K.L. 4036.
 Guenther, S.H. 7422.
 Guenther, T. 581.
 Guern, J. 7110.
 Guerra-Santos, L. 6922.
 Guerrant, G.O. 1652.
 Guerrant, R.L. 6425.
 Guerraz, D. 6183.
 Guesdon, J.L. 6644.
 Guesdon, J.L. 4169.
 Guest, J.R. 6004.
 Guevara, Y.G. 4582.
 Gugerli, P. 2432.
 Guglielmi, I.L. 4955.
 Guha, S. 852.
 Gui, E.J. 8330.
 Guidoboni, G.E. 6117.
 Guilmette, H. 8922.
 Guinand, M. 5129.
 Guine, P.A.M. 2506.
 Guiney, D.G., Jr. 2213, 6428.
 Guionie, M. 5275.
 Guiot, S.R. 4404, 4921.
 Guotio, A. 6483.
 Guiraud-Dauriac, H. 9261.
 Guisard, J.P. 3526.
 Guisard, A.H. 911.
 Guiso, N. 7723.
 Gui, H. 6079.
 Gulash, M. 6380.
 Gulk, P.V. 6561.
 Gulyas, F. 4676.
 Gumberton, R. 7280.
 Gumieniak, J. 1429.
 Gump, B.B. 8301.
 Gump, D.W. 8301.
 Gumpert, J. 4799.
 Gumpert, R.J. 821.
 Gunasekera, S.A. 8818.
 Gunderson, C.B. 596, 3237.
 Gundrum, J. 9192.
 Gunji, S. 2255.
 Gunn, P.R. 6643.
 Gunnell, P.S. 5436.
 Gunnig, H. 3269.
 Gunsalus, I.C. 910.
 Guo, H.-L. 8139.
 Guo, H.-H. 738.
 Guo, Z.-R. 4323.
 Gupta, A.A. 4018.
 Gupta, B.R. 3040.
 Gupta, S.S. 2873.
 Gupta, K.G. 5427.
 Gupta, J.S. 2007, 2083, 8142.
 Gupta, K. 7406.
 Gupta, K.G. 440.
 Gupta, R.C. 3548.
 Gupta, R.K.P. 2504.
 Gupta, R.P. 4662.
 Gupta, S.K. 2736, 8392.
 Gureeva, A.A. 9323.
 Gureeva, M.P. 2584.
 Gurilava, G.G. 7398.
 Gursaidadah, S. 9202.
 Guskov, A.V. 4355, 4441, 67736.
 Gusberti, F.A. 9310.

- Gushima, H. 6849.
Guskey, L.E. 8449, 9127, 9255.
Guss, S.P. 9185.
Gustin, E.J. 1203.
Gust, I.D. 6634, 8454.
Gustafson, D.K. 668, 617.
Gustafson, B.P. 7543.
Gustafsson, J.-G. 4174.
Gustafsson, M. 2840.
Gustavsson, L. 8174.
Gustavsson, I. 2840.
Guth, J.H. 1774.
Guthikonde, R. 6576.
Guthrie, M.A. 1035.
Gutkind, G. 4012.
Guttmann, L. 3038, 4687.
Gutnick, D. 8270.
Gutsche, W. 9124.
Guttay, A.J.R. 3948.
Gutter, Y. 2050.
Guttendage, C.S. 5052.
Guttman-Bass, N. 7532.
Guyer, M.S. 758.
Guyon, L.F. 5761.
Guyon, P. 4534.
Guzev, V.S. 1270.
Guzhova, E.P. 1889.
Guzdyak, P.I. 7618.
Gwynn, M. 3135.
Gymnast, I. 4965.
Gyuz, D. 8697.
Gyongyossy-Issai, M.I.C. 5376.
Gyr, K. 9129, 9088.
- Ha, D.C. 9208.
Ha, H.C. 8. 4958.
Haaker, H. 8608.
Haas, D. 1013.
Haas, R. 4266.
Haas, T. 4009.
Haasnoot, C.A.G. 4282, 4678.
Haasnoot, W. 7044.
Haasbich, F. 5811.
Habib, H.M. 6283, 7168, 8864.
Habib, M.E.M. 136.
Habig, C. 2183, 6396, 8272.
Habite, M. 1276, 5634.
Hachisuka, Y. 3334.
Hackbart, C.J. 478, 7343.
Hacking, A.J. 950.
Hacksaylo, E. 350, 3941, 5550, 5564.
Hadam, Y. 2779.
Hadden, C.T. 5919.
Hadies, G. 5645.
Hadley, W.K. 1865, 3287, 5046.
Haechler, H. 6303.
Haeghe, C. 4698.
Haegglund, T. 6190.
Haenel, F. 5395, 7470.
Haenel, I. 5395.
Haenishi, T. 2293.
Haenstroem, F.
Haenst, M. 6142.
Haest, M. 6705, 8394.
Hafeez, F. 2969, 8151, 8158.
Hafenberg, D. 9039.
Haff, L. 5918.
Hafidi, B. 6270.
Hafiz, I.A. 6061.
Hagander, P. 3635, 6143.
Hagedorn, D.J. 7939.
Hagen, F.S. 4987.
Hagen, N. 4812.
Hagenmaier, H. 4873, 8372.
Haggstrom, L. 140.
Hagino, H. 7881.
Hagihara, K. 1441.
Hagwara, N. 8653.
Hagler, W.M. 8728.
Hagler, W.M. Jr. 215, 1927, 3748, 4473, 6100, 7898.
Hah, Y.C. 4378.
Hahn-Hagerdal, B. 3493, 3624, 3659, 3687, 6531, 7436, 8664, 8676.
Hahn-Hagerdal, B. 140, 5127.
Hahn, E.C. 7543.
Hahn, G. 8708.
Hahn, M.G. 2782.
Haigh, E. 1108.
Haikali, N.Z. 1341, 8316.
Haimeovich, B. 3513.
Haissig, K. 139, 3556.
Haist, G.N. 1161.
Haladjian, J. 5108.
Halas, S. 603, 649.
Hald, B. 224.
Haldar, S. 3037.
Hale, D.V.C. 5032.
Hale, M.D. 1245.
Hale, M.G. 322.
Halen, P. 4028.
Haley, P.W. 1521.
Haley, V. 8412.
- Hall, B.J. 2643.
Hall, C.B. 4546.
Hall, D. 6093.
Hall, G.H. 8470.
Hall, I.M. 6083.
Hall, I.R. 7253, 8971.
Hall, J. 5919.
Hall, L.P. 6181, 6975.
Hall, M.J. 6554, 9151, 9152.
Hall, R.A. 2654.
Hall, S.L. 3297, 7583.
Hall, T.C. 4508.
Hall, T.J. 2062.
Hall, T.L. 7837.
Hall, W.H. 7426.
Hallakella, M. 7238.
Hallier, I. 3008, 4836.
Halme, A. 3394, 5968.
Halonen, P.E. 637.
Halsall, D.M. 2119.
Halsanen, A. 7450.
Halter, N. 1719.
Ham, D.L. 2115.
Ham, G.E. 406.
Hamada, M. 5857, 6804.
Hamada, Y. 8315.
Hamaguchi, K. 7685.
Hamakado, T. 2290.
Hamamoto, M. 7550.
Hamano, W.T. 7006.
Hamasaki, T. 4472.
Hamball, G.G. 2098, 8147, 8148.
Hambie, E.A. 2453, 2511.
Hambræus, A. 4139.
Hamdi, Y.A. 9345.
Hamed, A.A. 1341.
Hamed, S.F. 7787.
Hamelin, C. 8458.
Hamelin, J. 2159.
Hamer, G. 3127.
Hamid, A. 7889.
Hamid, N. 249.
Hamid, R.J. 495.
Hamill, R.L. 4870.
Hamilton-Miller, J.M.T. 2198, 4841, 6487, 6525, 8347.
Hamilton, C. 673.
Hamilton, N.F. 1032.
Hamilton, P. 3313.
Hamilton, P.B. 1927, 3748.
Hamilton, R.G. 4013.
Hamilton, R.M.G. 2748.
Hamilton, T.J. 8536.
Hamilton, W.A. 6665.
Hammett, N.V. 7339.
Hamm, P.B. 3909, 5468, 5650, 8927.
Hammer, D.K. 233, 1086.
Hammerschlag, F.A. 9156.
Hammerschmidt, R. 7205, 7206.
Hammes, G.G. 7899.
Hammond, E.G. 2729, 3699.
Hammond, Q.W. 1558, 4980.
Hammond, J.M. 1220.
Hammond, R.C. 7823.
Hammond, S.M. 9069.
Hamoda, M.H. 7084.
Hamoudi, A.C. 4189.
Hampton, A.W. 5580.
Hampton, J.C. 8108.
Hampton, D.K. 3275.
Hampton, R.O. 4500.
Han, M.H. 2248, 5083, 5168, 6026, 8663.
Han, W. 506.
Han, W.T. 9212.
Han, X.-D. 7182.
Han, X.-J. 1451.
Han, Y. 1602.
Han, Y.-R. 7485.
Han, Y.T. 8663.
Han, Y.W. 151, 3654, 5186.
Hancock, J. 1702.
Hanahan, D. 745.
Hanal, S. 166, 992.
Hance, R.J. 4830.
Hancher, C.W. 4107, 4110.
Hanchev, P. 1174.
Hanchey, J. 1115, 3928.
Hancock, R.E.W. 9178.
Handa, T. 1772.
Handelman, S.L. 6724.
Handelman, J. 5651.
Handoo, M.L. 1992.
Hanschmacher, M.D. 2587.
Hansfield, H.H. 679, 5047.
Hanzel, V. 3051.
Haneishi, T. 2302, 2310.
Haneissan, S. 7465.
Hang, C.-S. 7564.
Hang, Y.D. 5271.
Hangarter, R.P. 7901.
Hani, M. 910.
Hanka, L.J. 7360.
Hanker, I. 3879.
- Hankin, L. 8976.
Hanna, H.R. 4032.
Hannah, P. 793.
Hannan, R. 8114.
Hanner, P.K. 8696.
Hanners, P.K. 7846.
Hannington, G. 2438.
Hannon, B.R. 2297, 4877.
Hanounik, S.B. 3883.
Hansch, C. 4323.
Hanscomb, G. 3135.
Hansel, D. 3321.
Hansen, A.J. 5921.
Hansen, B.G. 4826.
Hansen, C.L. 7866.
Hansen, D.R. 8638.
Hansen, E.M. 3909, 5650, 8927, 8949.
Hansen, J. 2964, 5370.
Hansen, J.B. 5518, 5345.
Hansen, L. 5986.
Hansen, P.D. 561.
Hansen, P.W. 7677.
Hansen, S.L. 1630.
Hanso, M. 5603.
Hart, C. 2247.
Hanson, C.V. 814.
Hanson, M.R. 4983.
Hansrod, D. 5791.
Hanssen, H. 9283.
Hansson, B.G. 5882.
Hanson, G. 2184.
Hansstock, C. 957.
Hanumova, T. 2925, 2929.
Hanus, F.J. 8996.
Hansford, M. 3689.
Hanyu, Y. 2709.
Hao, O.Y. 678.
Hao, S.-L. 7485.
Happel, J.A. 1366.
Hao, S. 1325.
Hara, H. 3538.
Hara, S. 7114.
Hara, T. 1725.
Hara, T. 2619.
Harada, S. 6551, 7461.
Harada, T. 2634, 7763.
Haraguchi, T. 1022, 7115.
Harakeh, M.S. 6694, 6695.
Harano, Y. 85, 1802, 5128.
Harayama, S. 556.
Harb, S. 2511.
Harbour, G.C. 9122, 9123.
Harbour, J. 3242.
Harbov, D. 8302.
Hardegger, U. 1641.
Harder, A. 3534.
Harder, B. 5018, 6603.
Harder, D.E. 4577.
Harder, W. 997, 2125.
Hardie, D.G. 900.
Harding, C.D. 4446.
Harding, E. 7323.
Harding, R.J. 4082.
Harding, P.J. 3626.
Hardison, R.J. 8119.
Hardman, D.J. 4974.
Hardwick, W.A. 5327.
Hardy, K. 4698.
Hardy, L.W. 4277, 4278, 4279.
Hardy, M. 2580.
Hardy, R.W.F. 8251.
Hare, J.D. 2651.
Hare, R.S. 4865.
Harenberg, H.-E. 8314.
Hareford, N. 2327, 8631.
Hargrave, D.W. 2688.
Hargreaves, J.A. 1982.
Hargrett, N.T. 663, 7414.
Hargrove, R.E. 7011.
Hargrave, B. 3664.
Harch, B. 2513.
Harchar, K. 6378.
Harr, A.R. 807.
Harju, M. 8.
Harkink, R. 4594.
Harlander, S.K. 6990, 6991.
Harley, J.L. 2104, 3382.
Harman, J. 5425.
Harbec, P. 2778.
Harmon, R.J. 3271.
Harner, E.J. 8956.
Harnik, M. 5148, 5197.
Harper, D. 4931.
Harper, G.J. 2413.
Harper, J.D. 6088.
Harper, S. 4109.
Harper, S.R. 5843.
Harper, W.E.S. 6456.
Harrell, M.O. 5592.
Harrigan, E.K.S. 5449, 6296, 7188, 7970.
Harrigan, W.F. 8760.
Harrington, B.J. 4692.
Harrington, R. 6763.
Harrington, C.T. 3924, 4613.
- Harris, B. 3101.
Harris, C. 5785, 6387.
Harris, C.M. 8383.
Harris, C.R. 6387.
Harris, D.C. 5445.
Harris, D.M. 8401.
Harris, F.D. 5275.
Harris, J.G. 1962.
Harris, J.R. 663.
Harris, K.F. 7130.
Harris, M. 2497.
Harris, M.T. 4110.
Harris, P.J. 1681.
Harris, R.E. 1877.
Harris, R.I. 1941.
Harris, R.W. 6240, 6772, 7604.
Harris, S.K. 5895, 6759.
Harrison, B.D. 2065, 4553.
Harrison, F.G. 4050.
Harrison, J.G. 1970, 3794, 5413.
Harrison, M.A. 6987.
Harrison, V.J. 9275.
Harsch, P.B. 5130.
Harsh, M. 8336, 8339.
Hart, G.C. 3685.
Hart, F. 6712.
Hart, G.M. 4083.
Hart, J.H. 7233, 8945.
Hart, L.P. 4580, 5365, 5419.
Hart, R.C. 2441, 4156.
Hartel, P.G. 2951, 8241.
Hartemann, P. 1494, 4092, 4150.
Hartin, K.E. 2746.
Hartley, B.S. 2628, 7794.
Hartley, D.L. 5795, 6431.
Hartman, B.J. 5712.
Hartman, P.A. 773.
Hartmanis, M.G.N. 5113, 8588.
Hartmann, G.C. 6330.
Hartmann, L. 7510.
Hartmann, M. 9278.
Hartmann, R.W. 2069.
Hartman, W. 1739, 3499, 4408.
Hartung, A. 3831.
Haruta, M. 1062, 7000.
Harvey, A.E. 832.
Harvey, M. 9037.
Harvey, R.A. 2418.
Harvey, R.S. 7531.
Harvey, R.W.S. 4176, 4208, 5051.
Harvey, T.L. 8075.
Harville, B.G. 7140.
Hasebagen, J. 1633.
Hasegawa, A. 1560, 3180.
Hasegawa, H. 575, 2630.
Hasegawa, S. 5338, 7773, 8423.
Hasegawa, T. 1647.
Haselbeck, A. 2631.
Hasenboehler, A. 8405.
Hashiba, T. 5081.
Hashida, M. 455.
Hashiguchi, S. 3115.
Hashimoto, A.G. 7523, 9032.
Hashimoto, H. 3021.
Hashimoto, K. 3464.
Hashimoto, M. 7115.
Hashimoto, N. 4416, 4420, 5011.
Hashimoto, S. 3103.
Hashimoto, T. 905.
Hashimoto, Y. 505, 3104.
Hashizume, T. 2317.
Hasiak, R.J. 7886.
Haskell, T.H. 6478.
Hasler, H. 7452.
Hasler, J.F. 7540.
Hassain, S.E. 6610.
Hass, W. 8377.
Hassan, M.A. 7963.
Hassan, S. 8847.
Hassan, S.F. 7965.
Hassanali, A. 4738.
Hassani, L. 4997.
Hassing, F. 7842.
Hassler, R.A. 9029.
Hastie, A.T. 6411.
Hastings, R.C. 9086.
Hasty, J.J. 1682.
Hata, S. 944, 945, 2157.
Hatakeyama, H. 3641.
Hatakata, A.I. 1009.
Hatanaka, M. 1386.
Hatano, A. 3168.
Hatano, T. 8570.
Hatcher, J.A. 3245.
Hatcher, W.S., Jr. 7850.
Hatchikian, E.C. 3407.
Hathaway, B.A. 4323.
Hathfield, L. 7349.
Hatori, M. 6067.
Hattings, M.J. 274, 2801.
Hattori, M.W.C. 2573.
Hattori, E. 3334.
Hattori, J. 6379.
Hattori, T. 8235.
- Hattori, Y. 7479.
Hauffer, U. 4796.
Haug, A.R. 7902.
Haugland, R.A. 8996.
Hausinger, R.P. 4291, 8560.
Hauska, G. 4253.
Hausner, O. 9287.
Hausner, S. 9287.
Hauser, A.G. 208.
Hauke, P. 6128.
Havelaar, A.H. 2542, 8420.
Havelka, B. 9083.
Havlickova, L. 7671.
Havlik, I. 4879, 9235.
Havlik, J. 9043.
Haware, M.P. 298, 3867.
Hawes, M.C. 8754.
Hawkes, D.L. 7504.
Hawkes, F.R. 5696.
Hawkes, G.E. 4057.
Hawkes, H.A. 2540.
Hawkes, T.R. 2612, 3413, 5141.
Hawkey, P.M. 3076, 6410.
Hawkins, B.L. 1663.
Hawkinson, R.W. 484, 1380, 1665.
Hawley, G.C. 3685.
Hay, J. 8452.
Hayakawa, I. 5321.
Hayakawa, Y. 980, 3541.
Hayano, K. 2947, 8212.
Hayashi, E. 1314.
Hayashi, H. 7527, 8653.
Hayashi, K. 941, 4548, 3697, 6006.
Hayashi, M. 4347, 5979.
Hayashi, S. 12, 6842.
Hayashi, T. 1430.
Hayashida, M. 4284.
Hayashida, S. 159, 3471, 3540, 5994, 6150.
Hayashiya, K. 9113.
Hayati, J. 8022.
Hayden, F.G. 3066.
Hayes, K.W.O. 4507.
Hayes, M. 3947, 8212.
Hayes, P.S. 1084.
Hayes, S. 3330, 9306.
Hayes, T.D. 5301.
Hayes, W.A. 8995.
Hayhoe, J.H. 8989.
Haylock, R. 2725, 7820.
Hayman, D.S. 1205, 5448, 5643.
Haynes, C. 1236.
Haynes, U.J. 9187.
Hayes, V.W. 1317, 4466.
Hayward, A.C. 3774, 3779, 3780, 187.
Haywood, H.B., III. 8359.
Hazelton, P.R. 1558, 4980.
Hazelwood, D. 1996.
Hazen, T.C. 560.
Hazendont, T.G. 619.
Hazen, S. 6992.
Hedberg, P. 1934.
Heddy, S.E. 7960.
Healey, K. 8461.
Heap, R.A. 7861.
Heard, M.L. 9177.
Heard, M.C. 9555, 7174.
Heath, M.C. 1967.
Heath, R.B. 5009.
Heather, W.A. 360, 361, 2107.
Heber, F.V. 3914.
Heblthwart, P.D. 4236, 8108.
Heberlein, U. 6828.
Hebert, G.A. 3293.
Hebert, T.T. 2793, 7149.
Hecht, S. 2682.
Hecht, V. 2696, 5958.
Hedges, R.W. 5719.
Hedin, P. 8842.
Hedin, P.A. 8883.
Hedlund, M.E. 1250.
Hedlund, K.W. 1620.
Heel, R.C. 536.
Heeney, H.B. 6250.
Heerles, P.M. 558.
Heessen, F.W.A. 519.
Heegemans, W. 2362.
Heichel, G.H. 2979.
Heidt, A. 1636.
Heifets, L. 1660.
Heifetz, S.B. 6728, 7552.
Heikilä, H. 2100.
Heikonen, M. 1934.
Heil, J. 7022.
Heil, J.R. 6984.
Heilmann, H.-D. 7438.
Heimboldt, V. 2339.
Heimrich, A. 7334.
Heimrich, S. 157, 8655.
Heiner, D.C. 3259.
Heinlein, M. 8831.
Heinrichs, A.J. 4467.
Heinrichs, E.A. 6295.

Author Index

- Heinz, E. 2447.
Heintze, E. 5280, 6119.
Heistand, R.H. 5177.
Helstkamp, M.A. 9038.
Helzlsouer, C.M. 6918.
Helzlsouer, S. 8111.
Helzlsouer, T.W. 1463.
Helzlsouer, T.W. 4897.
Helzlsouer, D.M. 3051.
Helzlsouer, B. 464.
Helzlsouer, B.J. 8770.
Held, A.A. 528.
Heldrandt, C.M. 6612.
Helen, C. 4255, 4256.
Helsinki, M. 7589.
Helsingfors, O. 8159.
Heller, J.S. 2588, 2655.
Helling, J.H. 1998.
Helling, J.A. 6748.
Helling, K.B. 2502, 7450.
Helling, M. 182.
Helm, R. 7508.
Helms, K. 4503, 8460.
Helmstedt, A.G. 1648.
Helmberg, O. 6547.
Helmberg, A. 1286.
Helmelin, C. 5000.
Hemker, T. 6720.
Hemmila, I.A. 637.
Hempel, H.O. 807.
Hemphill, D. 9177.
Henderson, E.J. 4224.
Henderson, S. 1463.
Hendrick, L.K. 4244.
Hendrick, C.A. 7169.
Hendricks, L.T. 4590.
Hendricks, L. 3978.
Hendrix, F.F., Jr. 4527, 7996.
Hendrix, J.W. 389, 3358, 7298.
Hendry, R.M. 1561, 1565.
Heng, S. 8145.
Heng, Y. 1213, 2023, 3649.
Henkel, R.D. 4154.
Henkel, T.J. 4190.
Henle, W. 603.
Henninger, S.G. 6759.
Hennecke, H. 2962.
Hennrich, W. 1857.
Hennessee, W. 6799.
Hennessee, T.D. 2210.
Hennessee, J.N. 3293.
Hennessee, B. 1249.
Hennessee, J. 682.
Hennessee, R. 9553.
Henry, D.P. 158.
Henry, J.G. 1462.
Henry, J.G. 5362.
Henry, M.P. 4106, 5844.
Henry, N.K. 3267, 4036, 5038.
Henry, R. 5929.
Henry, J. 7708, 7709.
Hensarling, T.P. 3746.
Hensel, D. 795.
Hentschel, G. 1611.
Hepplinger, C. 9199.
Herberich, A. 5258.
Herberich, J.H. 6047.
Herbert, L.S. 7015.
Herbert, R.A. 5055, 6774.
Heritage, A.D. 3223, 6296.
Herz, G. 5962.
Herzfeld, A. 3534.
Herlich, M.B. 2458.
Herli, A.J. 1444.
Herman, A.C. 5018, 6603.
Herman, A.I. 3620, 8657.
Herman, M. 8762.
Herman, R. 1436.
Hermanns, R. 7941.
Hermansen, J.E. 1129.
Hermansen, K. 5370.
Hermida Escobedo, C. 9080.
Hermosillo, S. 4773.
Hernandez-Baumgarten, E.M. 4894.
Hernandez, P.E. 4034.
Herr, L.J. 7194, 8033.
Herrera, R. 5624.
Herrera, T. 1862, 1898.
Herrero, A.A. 4251.
Herrero, D. 3067.
Herring, A.J. 2446.
Herrington, R.W. 5880.
Herrington, T. 7951.
Herrmann, G. 4373.
Herrmann, K.M. 3371.
Herrmanns, M. 6988.
Herson, V.S. 8438.
Hertz, C.S. 742.
Hertz, R. 4778.
Herzog, C. 1377, 5752.
Hesseltine, P.N.R. 4752, 7409.
Hesslin, M. 5384.
Hessell, R.B. 9301.
Hess, B. 7684.
Hess, J. 1308.
Hess, W. 634, 1545.
Hesse, G. 7474.
Hesseltine, C.W. 7052.
Helmanski, J. 1630.
Hetrick, B.A.D. 7259.
Hettlerich, S. 8818.
Heu, M.H. 5493.
Heun, M. 8081.
Heuvelman, C.J. 4475.
Hevesi, M. 319.
Hewitt, G.M. 2706, 7745.
Hewitt, W.L. 7431.
Hewitt, R. 6078.
Heydemann, E. 3052.
Heyn, B. 1754, 9124.
Hibino, H. 5416.
Hibino, K. 70.
Hickey, M.W. 7862, 7863.
Hickey, R.F. 6685.
Hickisch, B. 7296, 8254.
Hickman-Brenner, F.W. 4690.
Hickman, A. 1604.
Hickman, J.R. 261.
Hicks, C. 1907, 1910.
Hicks, P.M. 7140.
Hicks, R.E. 6791.
Hilde, G.A. 8121.
Hiebert, E. 3815.
Hilde, T. 6072.
Hilden, B.H. 4045.
Hiestra, H. 997.
Hienholzer, J.C. 623, 5885, 7566.
Higa, A. 4707.
Higashi, K. 4295.
Higashi, K. 1282.
Higashi, T. 932, 8297.
Higashikawa, S. 9207.
Higashio, K. 3695.
Higashiohara, H. 1764.
Higgins, I.J. 425, 3401, 7823, 8547.
Higgins, M.L. 6411.
Higgins, R. 2516, 2520, 7593.
Higgins, S. 7146.
Higley, T.L. 6173, 6820.
Highsmith, A.K. 1503, 1946, 7539.
Hignett, R.C. 2009.
Higuchi, T. 2712, 4431, 5308.
Higuchi, W.I. 1352, 5746.
Higuchi, Y. 2625.
Hijnen, W.A. 5218.
Hijwegen, T. 8911.
Hikuma, M. 768, 3530.
Hildebrand, P.D. 1110.
Hilgenrath, S.W. 809, 3237.
Hilgenberg, W. 8874.
Hill, A.J. 2567.
Hill, A.O. 2564.
Hill, C.B. 7447.
Hill, B.M. 3353.
Hill, R. 5929.
Hill, D.T. 7509, 9033, 9226.
Hill, D.W. 7896.
Hill, E.A. 5227.
Hill, E.C. 1297, 8287.
Hill, E.K. 4998.
Hill, G. 7348.
Hill, G.A. 732.
Hill, H.A.O. 3401, 6928.
Hill, J.H. 247, 4998, 6224.
Hill, J.P. 7151, 7980.
Hill, R.L. 1904, 6205, 7197.
Hill, R.L. 4727.
Hill, S.A. 5883.
Hill, T.C. 358, 3842.
Hilleman, R.M. 4074, 4077.
Hilleman, R.M. 6641, 6646, 6651.
Hiller, K.O. 4769.
Hiller, M.D. 2463.
Hilliard, C. 3765.
Hillman, J.R. 346, 347.
Hills, D.J. 7306.
Hills, R.A. 8457.
Hills, J. 4994.
Hilts, G. 1444.
Hilton, M.G. 3002, 3003.
Himeno, M. 9113.
Himmel, M.E. 5159.
Hinchcliffe, P.M. 2473.
Hindmarch, J.M. 2498.
Hinds, D.B. 441.
Hine, R.B. 374, 6280.
Hinkley, J.E. 23.
Hinnbusch, B.J. 6714.
Hino, M. 6566.
Hinozawa, K. 2289, 3165, 3167.
Hirsch, M. 6988.
Hirsch, R.W. 8488.
Hinz, M. 461.
Hipp, S.S. 1602.
Hippe, H. 8648.
Hipp, S. 2889.
Hirabayashi, M. 584.
Hirano, M. 4490.
Hirano, N. 6406.
Hirano, S.S. 4497.
Hiraoka, T. 4820.
Hirata, T. 2377, 4862.
Hiratsuka, Y. 3913.
Hirayama, F. 958.
Hirayama, K. 3134.
Hirohara, H. 206.
Hirokawa, H. 9120.
Hiromi, K. 901.
Hironaga, K. 1373.
Hiron, M.R. 4975.
Hirooka, T. 2892.
Hirose-Kumagai, A. 2273.
Hirose, A. 172.
Hirose, S. 62.
Hirose, Y. 67, 3438.
Hirota, A. 2307, 2668, 4397.
Hirota, S. 5802, 7475.
Hirota, M. 8853.
Hirotsu, M. 6060.
Hirotsu, M. 4286.
Hirrel, M.K. 6313.
Hirsch, A.M. 6766.
Hirsch, C.F. 735.
Hirsch, P. 5818.
Hirsch, A. 6523.
Hirsch, D.C. 1573.
Hirstenstein, M.D. 5227.
Hiruki, C. 4523.
Hirayati, A. 249.
Hirashita, K. 1081, 3694.
Hisajima, S. 8686.
Hisamatsu, M. 948.
Hisayama, M. 2436.
Hiss, H. 2530, 8289.
Hissott, R. 4521.
Hitchcock, A.D. 7011.
Hitotsuyanagi, Y. 7478.
Hitz, W.D. 8251.
Hixon, D.L. 3297, 7563.
Hjerten, S. 7707.
Hjortso, M. 3403.
Hjortso, R. 6962.
Hlywka, G. 7420.
Hnatko, S.I. 3239.
Ho-Terry, L. 8446.
Ho, B. 1958.
Ho, C. 6811.
Ho, D.H. 9091.
Ho, H.H. 369, 7170.
Ho, M. 8330.
Ho, M.W.Y. 983

- ib, J. 355, 2826.
 ibalova, V. 1956, 2764.
 imova, M. 9334.
 ronovsky, V. 7557.
 udey, S.E. 3195, 3983, 4680.
 uska, J.F. 3437.
 yniewicz, W. 4316.
 siao, C.L. 820.
 sieh, D.P.H. 7075.
 sieh, P.L. 3192.
 su, E.J. 3578.
 su, H.T. 5892, 7561.
 su, L.C. 4160.
 su, S.C. 5510, 9256.
 u, K. 1554.
 u, L. 8432.
 u, S. 6661.
 u, S. 3097, 6522.
 u, W.J. 8757.
 uang, A.S. 4888, 4967.
 uang, C.H. 529.
 uang, C.P. 3192.
 uang, E.-S. 4022.
 uang, J.J. 5157.
 uang, J.S. 6243, 8992.
 uang, J. 78.
 uang, S.P. 6266.
 uang, T.S. 634.
 uang, Z. 473, 4935.
 uet, T.K. 6356.
 ubalek, Z. 6789.
 ubbard, J.A.M. 2565.
 ubbard, J.G. 7534.
 ubbell, D.H. 5629.
 ubbell, S.P. 2221.
 ubbes, M. 354, 366, 2114, 3826.
 uer, A. 5571.
 iber, D.M. 328.
 iber, J. 1042.
 iber, J.T. 3723.
 ubschwerien, C. 3173.
 ucks, C.E. 6673.
 udska, G. 2146.
 udska, M. 8699.
 udsen, W.R. 4202.
 udspeh, J.P. 1049.
 uezler, L. 5921.
 uet, M.C. 3445.
 uettel, M.D. 2657.
 uetter, R. 1012, 2698, 4426, 7834, 8639, 8681.
 uettermann, A. 8673.
 uettinger, K.J. 7302.
 uford, C.D. 3548.
 uger, A.M. 3569.
 uggins, A.R. 8710.
 uggins, J.W. 9117.
 ughes, C.A. 1289.
 ughes, C.E. 5785.
 ughes, D.B. 3588, 3636.
 ughes, D.E. 4437, 6390.
 ughes, D.M. 5678.
 ughes, E.J.L. 4422.
 ughes, J.V. 5746.
 ughes, K.L. 3087.
 ughes, M.M. 2565.
 ughes, P.R. 6901.
 ughes, R.G., Jr. 8335, 9123.
 ughes, R.K. 1305.
 ughes, T.J. 3388.
 ughes, T.P. 2326.
 ughes, W.M. 6423.
 ughes, W.T. 5731.
 ugo, W.B. 8651, 9094, 9137, 9168, 9343.
 ugues, B. 1628.
 uguet, P. 1587.
 uguet, T. 4660.
 uhanen, C.N. 7034.
 uiberts, N. 2043.
 uikeshoven, H. 5904.
 uikerson, C. 86, 3415, 5189.
 uibert, S.D. 8066.
 uili, R. 2045, 7924.
 uili, S.I. 7342.
 uili, W.E. 4469, 4470, 4471.
 uilt, M.F. 5815.
 uiltin, H.O. 5139.
 umar, G. 7001.
 umaydan, H.S. 6269.
 umber, D.P. 5902.
 umber, R.A. 6906.
 ummel, H. 2237.
 ummel, W. 31, 3427.
 umpherson-Jones, F.M. 1972.
 umphrey, A.E. 8537, 8539, 8683, 8692.
 umphrey, D.D. 5885.
 umphreys, J.T. 436.
 unari, A.A. 2617.
 undley, F. 654.
 ung, T.V. 5952, 8702.
 ung, Y.-T. 4115.
 ungate, R.E. 5117, 5121.
 ungerford, D. 7863.
 Hunley, K.L. 8360.
 Hunt, A.H. 4870.
 Hunt, A.S. 1137.
 Hunt, D.F. 5390.
 Hunt, G.A. 1232.
 Hunt, G.E. 388.
 Hunt, H.W. 1254.
 Hunt, R. 8459.
 Hunt, R.S. 2922.
 Hunter, A.C. 6973.
 Hunter, E.F. 712, 2508.
 Hunter, K. 2252.
 Hunter, M.T. 4113.
 Hunter, R.B. 1180.
 Hunter, T. 5588.
 Huovinen, P. 7347.
 Huppertz, J.L. 4015, 5531.
 Huq, A. 9286.
 Huq, M.J. 9286.
 Huraux, J.M. 6473.
 Hurd, B. 1127.
 Hurley, D. 2515.
 Hurley, H. 4375.
 Hurley, T.R. 2639.
 Hurrell, J.G.R. 5880, 8461.
 Hurst, A. 1924.
 Hurt, E.C. 4253.
 Hurlgen, J.P. 2253.
 Husain, A. 5254, 5394.
 Husain, S.I. 3930.
 Huser, H. 7747.
 Huss-Danell, K. 4594, 4609, 8152, 8153, 8499.
 Hussain Qadri, S.M. 3266, 6765, 6864.
 Hussain, Z. 5045.
 Hussey, R.L. 1396.
 Hussey, R.S. 371, 392.
 Husson, M. 8344.
 Husson, M.O. 1388, 4827.
 Hustus, L. 4181.
 Hustedt, H. 61, 4303, 4306, 8586.
 Hutchins, A.S. 5762.
 Hutchinson, C.R. 8378.
 Hutchinson, C.N. 3305, 4210, 5035, 8429.
 Hutchinson, J.G.P. 4933.
 Hutter, R. 2673.
 Huttermann, A. 5976, 7819.
 Huttinger, D.O. 2643, 6314.
 Hysman, P. 421.
 Hwang, B.K. 2799.
 Hyams, J.S. 8438.
 Hyleman, P.B. 4305, 4310.
 Hylen, A.M. 6729.
 Hyman, B. 6829.
 Hyung, J.I. 4101.
 Hyppae, T. 4979.
 l'Anson, K. 1829.
 Iacobellis, N.S. 8746, 8747, 8848.
 Iaconescu, M. 9281.
 Iannini, P. 7348.
 Iannotti, E.L. 5275.
 Iasiello, I. 8740, 8746, 8747.
 Ibe, A. 7108.
 Ibrahim, G. 4356.
 Ibrahim, G.H. 2792.
 Ibrahim, I.K.A. 283.
 Ichihara, A. 7115, 8738.
 Ichikawa, T. 2555.
 Ichimura, M. 2709.
 Ichino, M. 7107.
 Ichishima, E. 6041.
 Icke, G.C. 2472.
 Ide, J.A. 32.
 Ide, S. 506.
 Ide, T. 3442.
 Idemoto, H. 958.
 Idigui, M.O. 7973.
 Iegri, F. 1385.
 Igarashi, H. 231, 4482.
 Igarashi, Y. 606.
 Iginbiedon, J.E. 4465.
 Igielski, B.H. 540.
 Ignatchenko, A.V. 7312.
 Ignatenko, Yu.N. 7601.
 Ignoffo, C.M. 2857, 6900, 6903.
 Ignonina, Yu.A. 9325.
 Ihai, L. 1931.
 Ihn, W. 533.
 Iida, H. 6213.
 Iijima, Y. 3567.
 Imiori, T. 2308.
 Iino, T. 7756.
 Itak, Y. 8570.
 Itaka, Y. 8375.
 Iizuka, H. 5823.
 Iizuka, N. 6235.
 Iizuka, T. 1733, 6082.
 Iikawa, B. 3698.
 Ikanyama, N. 1332, 3055.
 Ikeda, A. 4948.
 Ikeda, C. 6067.
 Ikeda, D.P. 7330.
 Ikeda, H. 7674.
 Ikeda, K. 7685.
 Ikeda, T. 4882, 7551.
 Ikeda, Y. 958, 959, 1446.
 Ikemoto, T. 2292, 2293.
 Iker, H.P. 6724.
 Ikouchi, Y. 4101.
 Ikoma, M. 4033.
 Ikotun, T. 6281, 7720.
 Ikrum, H. 643.
 Ikrumova, S.I. 415.
 Ikushima, H. 2299.
 Ikushima, K. 1435.
 Ilag, L.L. 7632.
 Ilaui, M. 2147, 2932.
 Iland, P.G. 8665.
 Ilanionov, S.A. 5210, 7779.
 Iliescu, R. 463.
 Illarionova, V.I. 9039.
 Iloba, C. 7215, 7299.
 Ilstrup, D.M. 584, 814, 3337, 4159.
 Iltis, J.P. 636.
 Ilyaletdinov, A.N. 2700.
 Ilyina, E.F. 7689.
 Ilyin, S. 9005.
 Ilyinskaya, N.A. 493.
 Imada, A. 4837, 7461.
 Imai, C. 1052.
 Imai, H. 8511.
 Imai, K. 4393, 9030.
 Imai, S. 5905.
 Imamura, K. 8104.
 Imamura, K. 950, 3541.
 Imamura, N. 3165.
 Imanaka, H. 1434, 1435, 2299, 3103.
 Imanishi, H. 8067.
 Imbernon, M. 8697.
 Imberg, G. 6116.
 Imperial, J.S. 3824.
 Imshenetsky, A.A. 947.
 Imura, H. 3334.
 Imura, M. 5249.
 Inaba, Y. 5886.
 Inada, Y. 6033.
 Inagaki, K. 6853.
 Inagaki, T. 5208, 6057.
 Inamori, Y. 4797, 7384, 8309.
 Inatomi, K.-I. 8269.
 Indira, S. 8890.
 Indira Vechtomov, S.G. 9333.
 Ingham, E.R. 8983, 8985.
 Ingham, J.L. 5519.
 Ingianni, A. 8610.
 Ingie, S.J. 374.
 Ingleyby, A.J. 1252.
 Ingledew, W.M. 8667.
 Ingles, M. 2446.
 Ingram, D.L. 3310.
 Ingrand, D. 6473.
 Inigo, B. 3693.
 Inioles, D.S. 2.
 Inman, A.O. 2653.
 Inman, P.C. 8961.
 Innes, G.M. 1920.
 Innes, N.L. 1208, 3846, 5481.
 Innis, M.A. 3498.
 Inniss, W.E. 5306.
 Inokoshi, J. 3166, 3172.
 Inokuchi, N. 6863.
 Inoue, A. 6406.
 Inoue, H. 5416, 7187.
 Inoue, I. 3630.
 Inoue, J. 5245.
 Inoue, K. 4376.
 Inoue, M. 879, 1039, 1449, 4285, 5961, 8616.
 Inoue, Y. 3295, 4393.
 Inoune, S. 7546.
 Inouye, S. 1560, 2285, 2286, 2287, 2295, 4863.
 Inouye, T. 9092.
 Inoz, R.A. 3259.
 Installe, M. 5702, 6705, 8394.
 Inukai, M. 2302, 6556.
 Inukai, S. 7374, 7375, 7376.
 Inuzuka, K. 1424, 3148, 4880, 6130, 7581, 8659.
 Ioannou, N. 5532.
 Ioannioti, I. 4484.
 Ionescu, N. 2406, 6708.
 Iorio, G. 764.
 Iqbal, J. 1770.
 Ireland, C.R. 1966.
 Irie, K. 8653.
 Irie, M. 894, 8963.
 Izzary, H. 4588.
 Irmieri, A. 4762.
 Irrgang, K. 1752, 5143.
 Irshik, H. 2291, 3130, 4885, 9209.
 Irvine, R.L. 4920.
 Irwin, J.A.G. 5435.
 Irwin, M.E. 1973.
 Isbister, J.D. 2403, 7511.
 Ise, H. 6032.
 Ise, T. 578.
 Isenberg, H.D. 7625.
 Isenring, H.P. 6586.
 Isenrhagen, R. 2426.
 Isorovich, P.G. 1550.
 Ishac, Y.Z. 7284.
 Ishac, M.W. 2407, 4132.
 Ishibashi, K. 4284.
 Ishida, H. 4091.
 Ishida, J. 3137.
 Ishida, N. 3233, 4820, 7700.
 Ishida, R. 3068.
 Shige, M. 4451.
 Ishihara, J. 5012.
 Ishii, K. 7459.
 Ishijima, S. 5978.
 Ishikawa, Y. 6005, 6080.
 Ishikura, T. 2300, 5109, 5786, 5789, 7460.
 Ishimaru, K. 3137.
 Ishimaru, T. 1386.
 Ishino, F. 7432.
 Ishiyama, T. 3697, 4295.
 Ishizaki, H. 2892.
 Ishizawa, H. 5979.
 Ishizuka, M. 6046.
 Isikawa, Y. 6570.
 Islam, A. 7255.
 Islam, M. 4677.
 Islam, R. 3960.
 Ismail, A.A. 1055, 7078, 7081.
 Ismail, A.M.S. 3465.
 Ismail, I.K. 8104.
 Ismail, M.H. 6263, 8864.
 Isoda, S. 3577, 8269.
 Isogai, A. 2307, 5802, 7475, 7774, 9207, 9217.
 Ison, C.A. 1377, 5752.
 Isono, K. 1416, 3136, 4686, 5798, 9120.
 Isono, M. 3096.
 Israeli-Reches, M. 6427.
 Issel, C.J. 4162.
 Isshiki, K. 2300.
 Istre, G.R. 436, 7314.
 Itagaki, A. 5012.
 Itai, A. 7478.
 Itani, H. 6521.
 Ito, E. 7659.
 Ito, H. 935, 5359, 5823.
 Ito, M. 1552, 2286, 4766.
 Ito, S. 854, 9193.
 Ito, T. 5534, 5903, 8315.
 Ito, Y. 8653.
 Itoh, K. 7608.
 Itoh, M. 5012.
 Itoh, T. 868.
 Itoh, Y. 2299, 2310.
 Itonaga, M. 4286.
 Ivan, A.A. 2409.
 Ivan, J.A. 8915.
 Ivantskaya, L.P. 3082, 4058.
 Ivanov, A.P. 8455.
 Ivanov, B.F. 9022.
 Ivanov, N.A. 1813.
 Ivanova, G.S. 4309.
 Ivanova, L.G. 2557.
 Ivanova, M.V. 3074.
 Ivanova, N.M. 5136.
 Ivanova, O.E. 4928.
 Ivanova, V.S. 4398.
 Ivanova, V.T. 1704.
 Ivanova, V.V. 5118.
 Ivanyi, J. 3351.
 Iverson, W.P. 1028, 8411.
 Ivins, J.D. 7953.
 Ivory, M.H. 5569.
 Iwabuchi, S. 3585.
 Iwagami, H. 1398.
 Iwahara, S. 5977.
 Iwahori, K. 1464.
 Iwai, M. 1784, 1786.
 Iwai, Y. 1432, 2829.
 Iwaki, M. 4505.
 Iwakura, M. 99.
 Iwakura, M. 6863.
 Iwami, M. 1345, 3103.
 Iwanaga, S. 4490.
 Iwao, K. 958.
 Iwano, T. 4257, 8373.
 Iwasaki, S. 932, 7112.
 Iwasaki, Y. 2637.
 Iwata, M. 2286, 4863.
 Iwata, R. 3168.
 Iwayama, A. 2613.
 Iyehara-Ogawa, H. 9092.
 Iyemudov, J.A. 1769.
 Izadpanah, K. 262.
 Izaki, K. 4062, 5798.
 Izard, D. 1388, 4827.
 Izergina, E.A. 4764.
 Izuchi, T. 3180.
 Izui, K. 3489, 5978.
 Izumiya, N. 3142, 3736.

Author Index

- Jabaji-Hare, S.H. 4535.
 Jabes, D. 2282.
 Jack, J.F. 6482.
 Jackai, L.E. 8898.
 Jacks, T.J. 3746.
 Jackson-York, G.L. 8301.
 Jackson, D. 6449.
 Jackson, D.B. 6417.
 Jackson, E.A. 5883.
 Jackson, J. 3221.
 Jackson, R.B. 5685.
 Jackson, R.D. 1089.
 Jackson, R.M. 345, 5565, 5566.
 Jacob, C.O. 4078, 6654.
 Jacob, J.J. 1998.
 Jacob, Z. 4016.
 Jacober-Pivarnik, L.F. 5172.
 Jacobi, W.R. 3850, 7634.
 Jacobs, C.J. 4171.
 Jacobs, D.L. 7574.
 Jacobs, R.F. 492.
 Jacobsen, J. 4420.
 Jacobson, A. 8568.
 Jacobson, R.R. 9846.
 Jacobson, N.V. 1309, 7348.
 Jacoby, B. 7987.
 Jacq, A. 7673.
 Jacqueline-Jeanmougin, S. 2131.
 Jacquemin, E. 8762.
 Jacquot, M. 1274.
 Jacquignon, P. 9136.
 Jadavji, T. 9166.
 Jaeger, B. 2369, 6905.
 Jafari, S.A. 262.
 Jaffa, R. 4086.
 Jaffe, B.M. 5749.
 Jager, G. 325, 2088, 2089, 5514.
 Jagiciza, A. 2321.
 Jagusztyn-Krynica, E.K. 5345.
 Jahrling, P.B. 4020.
 Jain, M.K. 7503, 8395.
 Jain, S. 4800, 8339.
 Jain, S.C. 8143.
 Jain, S.M. 3428.
 Jain, V.K. 996, 6929.
 Jaiswal, K.S. 4779.
 Jakanski, P.E. 8415.
 Jakas, D.R. 651.
 Jakhmola, R.C. 7019, 7873.
 Jakobsen, I. 8978.
 Jakubowski, W. 3186.
 Jakubs, E. 3061, 9129.
 Jalil, M. 4228.
 Jaleel, S.A. 204.
 Jalil, R.A. 4969.
 Jalilkanen, M. 2558.
 Jakes, A.M. 8387.
 James, A.P. 147.
 James, B.R. 9027.
 James, E. 744, 6621.
 James, M.N.G. 20.
 James, P.R. 6771.
 James, R. 3159.
 Jammback, T.L. 3237.
 Jammouille, J.G. 5985.
 Jana, M.L. 3527.
 Janardhanan, K.J. 5254, 5394.
 Janauer, G.E. 1496.
 Janczak, C. 5486.
 Janda, I. 3292.
 Janda, J.M. 526, 2767, 6783.
 Jandel, A.-S. 3.
 Jancek, J. 4327, 4345.
 Jang, L.-K. 423.
 Jang, S.S. 4787.
 Janin, F. 1942.
 Jani, B.E. 2373.
 Janke, G.D. 1175.
 Janney, A. 3093, 9159.
 Janos, D.P. 7225.
 Janosek, J. 9044.
 Jankowska, I. 7612.
 Jans, J.D. 2042.
 Jansen, B. 8428.
 Jansen, N.B. 3589, 3597, 3644, 5262.
 Janssen, R. 2291.
 Jansen, W.H. 2506.
 Janshekar, H. 3599.
 Janssens, B.H. 5638.
 Janssens, D. 1648.
 Janssens, W.A. 1620.
 Janssens, J.H. 3604.
 Janssens, M. 7628.
 Janssens, P.-E. 1628, 4366.
 Janssens, P.-G. 4367.
 Jardim Freire, J.R. 2965.
 Jarmann, T.R. 5950.
 Jarnagin, J.L. 5895, 6759.
 Jaronski, S. 130.
 Jaronski, S.T. 5235.
 Jarosz, J. 9247.
 Jarrah, M.Y. 5253.
 Jarrell, W.M. 5616, 5642.
 Jarrett, R.G. 2117.
 Jarvis, A.W. 5335.
 Jarvis, B. 195, 7080.
 Jarvis, B.B. 1929, 7895.
 Jarvis, W.R. 1946, 8843.
 Jasensky, R.D. 2305.
 Jasmine, G.I. 7087, 7090.
 Jasmine, I. 7051.
 Jauthi, K.S. 6374.
 Jauneau, A. 8963.
 Javed, J. 8123.
 Javed, Z.U.R. 4500, 5517.
 Jaworski, C.A. 8090, 8871.
 Jazay, J.M. 9143.
 Jayakumar, A. 4195.
 Jayaram, R. 598.
 Jayanthi, C.R. 5124.
 Jayanthan, K. 8628.
 Jayasena, K.W. 5151, 5405.
 Jayasinghe, U. 8027.
 Jaynes, R.A. 4526.
 Jazrawi, S.F. 2407.
 Jeansson, S. 594, 4773.
 Jedraszczyk, J. 9135.
 Jedrah, M.S. 2760.
 Jeffery, R.P. III 4146.
 Jeffery, L. 3760.
 Jeffrey, K.K. 8033.
 Jeffries, T.W. 5394, 3657, 4234, 6144.
 Jegathesan, M. 9042.
 Jeger, M.J. 302, 2001, 5432, 8766.
 Jekel, P.A. 939.
 Jelen, P. 7032.
 Jeljasziewicz, J. 2271, 4316, 4705.
 Jemmal, M. 7073, 7097.
 Jen, W.-C. 2215.
 Jen, R.S. 366, 3926.
 Jenkin, H.M. 6475.
 Jenkins, A.L. 770.
 Jenkins, D. 668, 2343.
 Jenkins, M.B. 4184.
 Jenkins, S.F. 6338.
 Jenkins, S.H. 2545, 2549, 2550.
 Jenkins, S.R. 1477.
 Jenkinson, D.S. 6348.
 Jenkinson, J.F. 2900.
 Jenneman, G.E. 5265.
 Jennersten, O. 3840.
 Jenney, E.W. 7569.
 Jenni, B. 7503.
 Jennings, B.R. 748, 3283, 3350.
 Jennings, D.L. 3869.
 Jennings, H.J. 1453, 1832.
 Jibril, A. 6052.
 Jensen, A. 6341, 7257, 8214.
 Jensen, S.E. 1819, 5776.
 Jern, K.W. 845.
 Jerger, D.E. 3655, 4106, 4907.
 Jerz, M.E. 2461.
 Jeschke, G. 7840.
 Jesta, H. 4541, 8815.
 Jevae, T.M. 975, 7176.
 Jew, C. 3432.
 Jewell, K. 6178.
 Jewell, W.J. 4926.
 Jeyaseel, S.G. 8547.
 Jha, H.L. 1313.
 Jho, J.S. 2085, 8117.
 Ji, X. 71.
 Ji, Y.-J. 1451.
 Jiang, M.-K. 4992.
 Jiang, X. 8477.
 Jiang, X.-C. 2819.
 Jiao, Q. 506.
 Jicinska, E. 6964.
 Jidai, J. 4339.
 Jilka, C. 5746.
 Jimenez-Diaz, R.M. 1142.
 Jin, E.-O. 7226.
 Jin, T.-R. 9324.
 Jinbo, K. 7000.
 Jing, G.-Z. 6610.
 Jing, K. 5986.
 Jiresova, M. 4345.
 Jirku, V. 4976, 6021, 7787.
 Jirku, V. 5101.
 Jodice, R. 4099.
 Joergensen, B.B. 3613, 8206.
 Joergensen, J.H. 2839, 5501.
 Joernvall, H. 7656.
 Joester, W.M. 3477.
 Joglekar, A.V. 8532.
 Johal, G.S. 7943.
 Johandides, V. 8476.
 Johansen, B.V. 5598.
 Johansen, J.B. 6332, 6333, 8211.
 Johansson, C. 4008.
 Johansson, K.R. 7497.
 Johansson, M. 3642.
 John, D.I. 6535.
 John, T.J. 2443.
 John, T.V. 828.
 Johns, M.A. 7152.
 Johnson, A.G. 303.
 Johnson, A.P. 697.
 Johnson, B.F. 4443.
 Johnson, B.R. 3647.
 Johnson, B.T. 2329, 9038.
 Johnson, C. 8704.
 Johnson, C.H. 3272.
 Johnson, C.R. 1269, 5642, 8219.
 Johnson, D.A. 1170, 6379.
 Johnson, D.E. 4386, 6895.
 Johnson, D.L. 4787.
 Johnson, D.R. 6078.
 Johnson, E. 5811.
 Johnson, E.P. 1000.
 Johnson, E.E. 3106.
 Johnson, E.L.V. 1269.
 Johnson, F.W.A. 4206.
 Johnson, G. 2515, 2525.
 Johnson, G.I. 2019.
 Johnson, G.P. 4672.
 Johnson, H.A. Jr. 6267.
 Johnson, J. 9263.
 Johnson, J.C. 4956.
 Johnson, J.E. 771, 3081, 4197.
 Johnson, J.H. 4448, 5805.
 Johnson, J.L. 2513, 5304.
 Johnson, J.M. 6900.
 Johnson, K.B. 1114.
 Johnson, K.G. 1832, 5192.
 Johnson, L.F. 1148.
 Johnson, L.M. 1019, 8684.
 Johnson, M.C. 736, 979, 8119.
 Johnson, P.C. 9309.
 Johnson, R. 258, 2856, 5476.
 Johnson, R.C. 4893.
 Johnson, R.H. 1078.
 Johnson, S.E. 2494.
 Johnson, S.L. 1065.
 Johnson, S.R. 687.
 Johnson, W.M. 2832, 3761.
 Johnson, W.S. 6765.
 Johnson, Z.B. 2748.
 Johnsrud, S.C. 878, 4436.
 Johnsen, K. 8169.
 Johnston, J.B. 4087.
 Johnston, J.L. 8359.
 Johnston, J.M. 2722.
 Johnston, M. 4736.
 Johnston, P.A. 3990.
 Johnston, P.D. 6477.
 Johnston, R.W. 1051, 3110, 6983.
 Johnston, S.A. 5508.
 Johnstone, D.L. 9252.
 Johnstone, P.D. 8971.
 Jokes, M. 3847.
 Jokinen, K. 8169.
 Jokik, W.K. 6613.
 Joldersma, W. 1308.
 Jolivet, M. 9219.
 Jolley, R.L. 2337.
 Jolly, J.L.S. 2480.
 Jolma, E. 398.
 Joly, J.F. 2518.
 Jones, A. 2757, 5796, 5931.
 Jones, A.J. 3735.
 Jones, A.L. 344, 1104, 2797, 3881, 5429, 7127.
 Jones, C. 766.
 Jones, C.A. 3000.
 Jones, D. 8487.
 Jones, D.B. 8312.
 Jones, D.E. 752, 2451.
 Jones, D.G. 302, 5432.
 Jones, D.T. 7794.
 Jones, E.B.G. 1306.
 Jones, F.T. 4466, 4473, 7884.
 Jones, G. 3650.
 Jones, G.A. 2315.
 Jones, G.H. 7938.
 Jones, I.T. 307.
 Jones, J.B. 276, 4537, 4560, 4561, 4563, 6273.
 Jones, J.D.G. 6366.
 Jones, J.G. 6768.
 Jones, J.L. 7814.
 Jones, J.P. 4581.
 Jones, J.R. 2324.
 Jones, J.W. 237.
 Jones, K.L. 545, 911, 1457.
 Jones, K.R. 6431.
 Jones, M.P.A. 1646.
 Jones, M.S. 4816.
 Jones, O.T.G. 6893.
 Jones, P. 6675.
 Jones, P.W. 4280.
 Jones, R.B. 658, 8360.
 Jones, R.K. 222.
 Jones, R.N. 483, 487, 501, 502, 503, 531, 1329, 1392, 2236.
 Jones, S. 2262, 3073, 3095, 3099, 3105, 4688, 4819, 4830, 4834, 4835, 4885, 5744, 6421, 6455, 6511, 6527, 7439, 9184.
 Jones, R.W. 8919.
 Jones, S.B. 218.
 Jones, S.T. 8655.
 Jones, T.A. 7979.
 Jones, T.E. 902, 7519.
 Jones, W.J. 2182.
 Jonker, J.P. 2797, 3881.
 Jon, L.S. 7735.
 Jordan, D.C. 681.
 Jordan, E.M. 7121.
 Jordan, F. 7721.
 Jordan, W.R. 8009.
 Jore, J. 6605.
 Joret, J.C. 548.
 Jorgensen, J.H. 434, 759, 771, 1422, 2860, 3081, 3156, 4197.
 Jori, G. 899.
 Joseph, K.T. 3468.
 Joseph, R. 3470, 8598.
 Joshi, K.R. 7416.
 Joshi, L.M. 1183, 3808, 6246, 7911, 7984.
 Joshi, P.A. 4370.
 Joshi, P.C. 6469.
 Joshi, P.K. 4646.
 Joshi, A.V. 957.
 Joslyn, L. 1360.
 Josseland, M. 4454.
 Jostmann, Th. 5924.
 Jostova, B. 3847.
 Jothi Kumar, N. 4093.
 Jouanel, P. 4052.
 Jouanin, L. 4680.
 Jouanol, M.C. 9133.
 Jouanne, T. 2392.
 Jouis, M. 8963.
 Jousimies-Somer, H. 9313.
 Jousimies-Somer, H.R. 8467.
 Jouve, H.M. 1778.
 Jouvenot, M. 7345.
 Joyeux, A. 6134, 6936.
 Ju, N.-H. 2679, 2680, 4412, 7729.
 Juang, H.-D. 5195.
 Juchau, S.V. 2442.
 Judes, H. 776.
 Juliano, H.H. 7458, 7841.
 Judith, F.R. 1065.
 Judkins, J.F. Jr. 4915.
 Juergens, D. 7747.
 Juhász, S. 6810.
 Juhnke, M.E. 4218.
 Juliano, R.D. 4858, 4859.
 Julien, M.H. 8650.
 Julkunen, I. 9276.
 Julkunen, J.-S. 4660.
 Jung, G. 2301, 8160, 8163.
 Jungkind, D.L. 1363.
 Jun, B.A. 737.
 Junkins, B. 8437.
 Junkins, L.L. Jr. 5295.
 Junter, G.-A. 2392.
 Junstak, L. 7728, 8397.
 Jurnak, F. 8522.
 Just, E. 5917.
 Justewicz, D.M. 6647.
 Justin, S.H.F.W. 5445.
 Juven, B.J. 7009.
 Juwiv, J.A. 8091.
 Juyan, X. 3163.
 Kadoya, S. 9092.
 Jyothi, E.K. 8712.
 Kaack, H.J. 3786.
 Kaappeli, O. 7308.
 Kabanova, E.A. 4182.
 Kabara, J.J. 9267.
 Kabat, E.A. 1830.
 Kabeonell, A. 6643.
 Kabeel, M.T. 2901.
 Kabi, A.J. 5294.
 Kabi, A. 8812.
 Kabi, M.C. 6469, 9015.
 Kabins, S.A. 8292.
 Kachan, A.F. 921.
 Kachel, W.M. 2260.
 Kachholz, T. 4886.
 Kaczmarek, W. 2180.
 Kada, T. 3329.
 Kader, A.A. 3853, 8057.
 Kadion, O.P. 2071.
 Kadkol, S.B. 6199.
 Kadot, C.I. 2074, 8856.
 Kadokura, J.-I. 3149.
 Kadota, T. 1466, 6868.
 Kadoya, S. 4376.
 Kaeenik, A. 1249.
 Kaerlebe, M.L. 4147.
 Kaerlebe, N.A. 8762.
 Kaerlebe, C.F. 594.
 Kaerlebe, C. 592.
 Kaetsu, I. 812, 1044, 1759, 3466, 4330, 5178, 5896, 6027, 6949.
 Kagamiyama, H. 6843.
 Kagan, Z.S. 7727.
 Kagawa, Y. 585.
 Kagi, R.F. 674.
 Kagnoff, M.F. 461.
 Kagramanova, V.K. 2766.
 Kahl, G. 8874.
 Kahl, J.-U. 7906.
 Kahn, I. 8408.
 Kahn, S.M. 1117.
 Kahn, V. 2594.
 Kahudova, J. 1913.
 Kaimaktchiev, A.C. 5961.
 Kaara, M.S. 4662.
 Kaari, G.M. 4590.
 Kaiser, P. 2941.
 Kaiser, W.J. 3905, 8114.
 Kaji, A. 1761, 5133, 7120.
 Kakimoto, K. 9092.
 Kakinuma, E. 884.
 Kakishima, M. 8961.
 Kaku, M. 2625.
 Kalai, J. 778.
 Kalalova, S. 2656.
 Kalashnik, S.A. 6439.
 Kalberer, P. 8701.
 Kalbfleisch, J.H. 5930.
 Kallor, J. 782.
 Kale, S.P. 1268.
 Kalengayi, M.M.R. 7057.
 Kalon, A. 127, 6089.
 Kalica, A. 6595.
 Kalina, N.M. 476.
 Kalinskaya, T.A. 7287.
 Kalish, G. 1541.
 Kalish, S.B. 6773, 7590.
 Kalien, R.G. 906, 908.
 Kalings, I. 482, 3216.
 Kalings, L.O. 3216.
 Kalmar, J. 137.
 Kalmaroff, J. 3217.
 Kalnawski, G. 4963.
 Kalra, D.S. 7093.
 Kalur, S.V. 2584.
 Kaluyants, K.A. 4348, 7737.
 Kaluzh, V. 2584.
 Kamada, H. 5798.
 Kamal, 8017.
 Kamal, A.J.M. 7260.
 Kamata, R. 1779.
 Kamata, S. 2668.
 Kamth, V. 2584.
 Kamnaya, Y. 5308.
 Kambe, M. 2630.
 Kamei, T. 3483.
 Kamefiring, J.P. 542.
 Kameshita, I. 3489.
 Kametwar, L. 4783.
 Kamik, T. 4793.
 Kamikubo, T. 101, 169, 981.
 Kamimura, H. 7108.
 Kamimura, T. 2316.
 Kaminsky, S.G.W. 1967, 6221.
 Kamya, K. 6551.
 Kampe, E.M. 7118.
 Kamper, M. 8161.
 Kamra, D.N. 7019, 7873.
 Kamraa, O.P. 4903.
 Kanai, H. 3021.
 Kanarek, K.S. 752, 2451.
 Kanazawa, H. 3440.
 Kanazawa, S. 7492.
 Kanda, K. 4161.
 Kanda, Y. 9097.
 Kandeel, M.M. 7362, 9102.
 Kane, E. 1546.
 Kaneda, M. 3142.
 Kaneko, N. 5886.
 Kaneko, T. 6996.
 Kanemoto, R. 2611.
 Kaneto, E. 1552.
 Kang, A.S. 6234.
 Kang, C.Y. 2424.
 Kang, K.S. 8622.
 Kangatharalingam, N. 5936.
 Kangro, H.O. 5009.
 Kanhere, S.R. 3737.
 Kaniowski, W. 6227.
 Kankie, B. 7493.
 Kankovs, J. 6309.
 Kanmera, T. 3736.
 Kanniyan, J. 7139.
 Kanioglu, L.M. 8342.
 Kanodia, S. 927.
 Kanosh, S. 279.
 Kantzas, J.G. 1210.
 Kanzaki, M. 4695.
 Kao, J.F. 3192.
 Kaper, J.B. 2325.
 Kaper, C. 4890.
 Kapikian, A. 4165, 6595, 6598.
 Kapikian, A.S. 3233.
 Kaplan, J. 3257.
 Kaplan, A.M. 5838.
 Kaplan, B. 6915.
 Kaplan, D.A. 624, 7119.
 Kaplan, D.L. 5838.
 Kaplan, D.R. 4190.
 Kaplan, R.L. 736, 4744.
 Kaplan, S.L. 441, 2515.

- Aspor, I.J. 7208.
Aspor, K.K. 8391.
Aspö, A.J., Jr. 1153, 8863.
Aspö, M. 7576.
Aspö, A.J. 1603.
Aspöberg, J.G. 4953.
Aspönik, E. 973.
Aspönik, V. 5657, 6367.
Aspösevic, Yu.G. 1043.
Aspösson, R.B. 2402.
Aspö, R.K. 8612.
Aspö, J. 4760.
Aspökov, B.P. 9200.
Aspö, A. 1986.
Aspö, W.W. 6888.
Aspö, G.A. 6854.
Aspö, G.H. 1382.
Aspöman, G. 2219.
Aspöman, G. 3609, 6123, 7770, 7799, 7811, 8532.
Aspöman, H. 871, 5114.
Aspösevic, Y.N. 6954.
Aspö, G.I. 2181, 7301.
Aspö, H. 6058.
Aspö, A. 2063.
Aspö, M.K. 1135.
Aspö, V.P. 2319.
Aspö, N.V. 8341.
Aspö, F. 5694, 8675.
Aspö, J.D. 1349.
Aspö, D.M. 4143.
Aspö, E. 6729.
Aspö, W. 320.
Aspö, J. 627.
Aspö, J. 3409.
Aspö, J.S. 3679.
Aspö, A. 8321.
Aspö, M.Y. 5152.
Aspö, V.I. 1300, 7304.
Aspö, G.P. 6866.
Aspö, I.A. 5089, 8485.
Aspö, T.S. 9333.
Aspö, M. 3584.
Aspö, A. 1835.
Aspö, D.B. 1653.
Aspö, T. 986, 6937.
Aspö, I. 418, 767, 768, 1468, 1805, 3530, 3577.
Aspö, P. 7367.
Aspö, R. 866.
Aspö, E. 4094.
Aspö, M. 5249.
Aspö, N. 8578.
Aspö, V. 4796.
Aspö, H. 714.
Aspö, A. 192.
Aspö, T. 4182.
Aspö, Y. 1954, 5197.
Aspö, V.N. 2589.
Aspö, C. 1851, 5987.
Aspö, D.L. 721.
Aspö, D.L. 6887.
Aspö, B. 6288.
Aspö, J.C.S. 5521.
Aspö, H. 3291.
Aspö, E. 2581, 2592, 4332.
Aspö, M.N. 1070.
Aspö, J. 941, 3458, 6006.
Aspö, G.J. 5016.
Aspö, H. 2180, 5614.
Aspö, J.C.S. 5521.
Aspö, H. 3291.
Aspö, H.R. 2090.
Aspö, A. 1058.
Aspö, M. 76.
Aspö, T. 2293.
Aspö, U. 956.
Aspö, M.L. 4932.
Aspö, N.B. 6478.
Aspö, A. 455.
Aspö, C. 894.
Aspö, F. 6550.
Aspö, K. 5208, 6057.
Aspö, M. 4091.
Aspö, N. 742, 5228.
Aspö, T. 101, 1128, 3736, 5191.
Aspö, Y. 4797, 7384, 8309, 9092.
Aspö, K. 7608.
Aspö, R. 5071.
Aspö, T. 1310, 5321.
Aspö, K. 2014.
Aspö, G.S. 4058, 7454.
Aspö, T. 9198.
Aspö, H. 944, 945, 3489, 5978.
Aspö, S. 3104, 6059.
Aspö, T. 1552, 3349.
Aspö, A. 132.
Aspö, K. 1314.
Aspö, N. 2320.
Aspö, T. 279.
Aspö, B.H. 6252.
Aspö, D. 8443.
Aspö, E. 4023.
Aspö, E.B.S. 2410.
Aspö, S. 8688.
Aspö, W. 3143.
Katzen, R. 7803.
Katzenellenbogen, E. 6052.
Kauffman, C.A. 742.
Kauffman, H.F. 2533.
Kauffman, P.E. 3272.
Kauffman, B.T. 4323.
Kauffman, L. 810, 4228.
Kauffman, A. 8787.
Kauffman, C.S. 1657.
Kaul, J. 6198.
Kaul, J.L. 8052.
Kaul, J.N. 5677.
Kaul, R. 8542.
Kaur, B. 186.
Kaur, I. 3999.
Kaur, J. 2085.
Kaura, A.C. 7433.
Kaura, Y.F. 2765.
Kaurav, L.P. 8088.
Kaushik, J.C. 8016.
Kauss, H. 3796.
Kavanagh, B.V. 7015.
Kawabata, S. 4482.
Kawabata, T. 2933.
Kawaguchi, A. 8528, 8529.
Kawaguchi, H. 1702, 8067, 8890.
Kawaguchi, S. 1489.
Kawaguchi, T. 8367.
Kawai, F. 7678.
Kawai, H. 960.
Kawai, K. 862, 4472.
Kawai, K.I. 5249, 8375, 8681.
Kawai, M. 2305.
Kawai, S. 2992.
Kawai, Y. 2299.
Kawakami, K. 113.
Kawakubo, H. 3577, 8269.
Kawamori, M. 505, 3104.
Kawamoto, F. 9113.
Kawamoto, T. 9.
Kawanishi, T. 7000.
Kawano, E. 206.
Kawano, K. 5497.
Kawano, T. 8596.
Kawano, Y. 81, 862, 1438.
Kawao, Y. 7007.
Kawasaki, H. 227.
Kawashima, H. 4847.
Kawata, K. 4938.
Kawata, S. 5137.
Kawata, Y. 1757.
Kawczynski, M. 4328.
Kay, B.A. 6781.
Kay, D. 2401.
Kaya, H.K. 5216.
Kayahara, H. 4421.
Kaye, B. 8547.
Kaymakchiev, A. 6035.
Kays, S.J. 5457, 5686.
Kazak, N.F. 4701.
Kazanskaya, N.F. 4304.
Kazantseva, V.A. 4928.
Kazarnova, L.A. 115, 952.
Kazari, G. 8062, 8063.
Kazhovan, S.V. 9200.
Kazlauskas, D.A. 4335, 5194, 7743.
Kazmierczak, A. 5769.
Keane, P.J. 5612, 6286.
Keane, K.M. 5034.
Keane, P.C. 1041, 6157.
Keast, D. 2099, 8991.
Keatch, R. 6710.
Keating, M.A. 3260.
Keating, M.H. 6435, 6504.
Kebekbayeva, K.M. 917.
Keck, J.W. 248, 7937.
Kedar, N. 5482.
Keeling, B.L. 7935.
Keeling, J. 8863.
Keen, M. 3351.
Keen, N.T. 2000, 2075.
Keene, R. 7010.
Keeney, D.R. 7274, 7285.
Keenly, C.W. 943.
Kegler, H. 8003.
Kehres, L.A. 9315.
Keifer, C.J. 1657.
Keigher, N.L. 1586.
Keith, D.D. 6532.
Keith, J. 6595.
Kekcheva, N.G. 4182.
Kellias, J.D. 2117.
Kellen, W.R. 6904.
Keller, B. 1701.
Keller, E. 1701.
Keller, K.F. 700, 2491, 5042.
Keller, L.C. 4718.
Keller, P.J. 524.
Keller, P.M. 2225, 5018.
Keller, U. 2364.
Kelley, E. 1318.
Kelley, M.L. 4952, 6714.
Kelling, K.A. 8261.
Kellogg, D.S., Jr. 735.
Kellova, G. 6488.
Kelly, C.T. 2598, 4360.
Kelly, D.P. 942, 3000, 7703.
Kelly, J.A. 3457, 4274, 7116.
Kelly, M. 201.
Kelly, M.C. 5041.
Kelly, M.T. 466, 755, 1671, 4728, 5032, 6782, 6786.
Kelly, R.T. 3283.
Kelly, W.J. 5717.
Keltjens, J.T. 1703, 4678.
Kemp, G.A. 8249, 8250, 9021.
Kemp, J.D. 3730, 7857.
Kemp, M. 2235.
Kemp, M.S. 5500.
Kemp, A.J. 1427.
Kemp, E. 2551.
Kempton, A.G. 5333, 6967.
Kendall, A.P. 610.
Kendall, C. 4154.
Kennerly, C.M. 1234, 1235, 5610.
Keness, J. 1418.
Kenig, R. 5162.
Kenne, L. 1826, 1832, 4364.
Kennedy, D.A. 8457.
Kennedy, J.F. 145, 146, 1864, 2659, 9070, 8166, 8669.
Kennedy, K.J. 6666.
Kennedy, L.D. 4368.
Kennedy, M.J. 888.
Kennedy, M.S. 4905.
Kennedy, P.G. 2235.
Kennedy, R.C. 4154, 6609.
Kenneth, R.G. 3649.
Kenney, D.S. 830, 5649.
Kenney, G.E. 772.
Kent, D.L. 4946.
Kent, S.B.H. 6617.
Kenyon, J.E. 6715.
Kent, J.P.R. 1982.
Kerckhoffs, E.J.H. 7796.
Kereluk, K. 5665.
Keren, D. 4890.
Keren, S. 118.
Kerenyi, M. 7318.
Kerwan, Y. 81, 1881.
Kerkering, T.M. 582.
Kern, A.C. 9152.
Kern, D. 1765.
Kern, E.R. 2226.
Kerner-Gang, W. 7241, 7243.
Kern, J. 3778.
Kerr, E.A. 1178, 1719.
Kerr, J.D. 8650.
Kerr, K.M. 7117.
Kerr, R.D. 177.
Kerr, T.J. 177, 2918, 7882.
Kers, L.E. 132.
Kessado, T. 3096.
Keskär, S. 6013, 7750.
Kessak, R.H. 2590.
Kessler, H.G. 8711.
Kessler, J.J., Jr. 7163, 7995.
Kessock-Phillip, S. 2484.
Kesswani, C. 3015.
Kewick, B.H. 563, 5852, 7526, 7533.
Kilbane, J.J. 3679.
Kilbertus, G. 2917.
Kilbourne, E.D. 1541, 1567.
Kilburn, D.G. 6017, 6018, 6633.
Kilburn, J.O. 1320.
Kile, G.A. 217.
Kilen, T.C. 2064.
Kiley, M.P. 1548.
Kilian, S.G. 985.
Kilic, O. 8605.
Kilham, K.S. 8245.
Kiltsby, D.C. 3714.
Kim, B.-J. 2347.
Kim, B.H. 8646.
Kim, C.U. 9187.
Kim, H.S. 4452.
Kim, J. 5886.
Kim, J.H. 3603.
Kim, J.W. 2731, 7866.
Kim, K.-S. 3817.
Kim, K.-W. 244, 435, 1381.
Kim, M.N. 106.
Kim, N.-K. 2679, 2680, 4412.
Kim, S.-U. 5252.
Kim, S.K. 8895.
Kim, Y. 7448.
Kim, Y.J. 3603.
Kimata, H. 8627.
Kimber, A. 7155.
Kimber, G. 1197.
Kimberlin, L.C. 807.
Kimble, E.F. 8512.
Kimble, K.A. 4565, 8901.
Kimura, A. 6849.
Kimura, G. 3349.
Kimura, K. 9, 2289.
Kimura, M. 3176.
Kimura, T. 2613, 5151, 7678, 8523.
Kimura, Y. 884.
Kinashi, H. 6552.
Kincard, C.R. 5295.
Kincannon, D.F. 1469, 1486.
Kindlerer, J.L. 5344.
King, A. 497, 6465.
King, A.C. 7880.
King, A.D., Jr. 7101.
King, A.M.Q. 6635.
King, B. 1244, 1246, 7245.
King, D.J. 5132, 9280.
King, E.J. 834.
King, J. 3331.
King, J.E. 1985.
King, J.W. 6516.
King, J. 7597.
King, P.P. 4110.
King, S.B. 8071, 8074, 8880.
King, S.D. 5707.
King, V.A.E. 2684.
King, V.A.E. 2689.
Kinghorn, J.R. 3591, 5267.
Kingman, A. 6728.
Kingsbury, W.D. 4755, 4758.
Kingsland, G.C. 5398.
Kingston, D.G.I. 532, 1423, 9210.
Kingston, P.J. 2554.
Kingston, R. 59.
Kinney, J. 6921.
Kino, E. 6566.
Kiosz, D. 7626.
Kipranaly, A.E. 7313.
Kiralay, Z. 2775.
Kiralay, A. 521.
Kiryte-Angel, S. 8773.
Kirby, L.K. 2749.
Kirby, M. 4181.
Kirenberg, F. 2257.
Kiriolla, L.M. 7311.
Kiriolla, N.P. 8233.
Kirk, J.J. 7954.
Kirk, S. 5687, 5589.
Kirk, T.K. 3452, 6011, 7817, 7829.
Kirkham, A.J. 2682.
Kirkland, K.D. 2253.
Kirkland, T.N. 1339.
Kirkpatrick, J. 2209.
Kirkwood, W.L. 1802.
Kirkwood, R.C. 6184.
Kirkwardoyo, S. 134.
Kirova, S.A. 1679.
Kirsch, E.J. 1035.
Kirsch, J.P. 4277, 4278, 4279.
Kirst, J. 132.
Kirsch, B.H. 3002, 4400.
Kirst, H.A. 427.
Kirsten, U. 285.
Kisvan, D.J. 3550, 3551.
Kiss-Tamas, A. 3061.
Kissick, T.P. 6583.
Kiselev, A.V. 4313, 5170.
Kish, A.J. 1482.
Kishimoto, M. 5964, 8503.
Kishimoto, S. 3115, 7481.
Kishovskaya, S.A. 6933.
Kishore, N. 310.
Kishat, A.A. 6263.
Kisliuk, R.L. 6447.
Kisliukhina, O.V. 6880.
Kiss, G.B. 442.
Kiss, P. 4939.
Kissick, T.P. 6583.
Kissinger, J.C. 4723.
Kissling, J. 2461.
Kisumi, M. 5971.
Kita, E. 714.
Kitagawa, T. 3109.
Kitagawa, Y. 4260.
Kitagawa, S. 6570.
Kitahara, T. 8627.
Kitahara, S. 1785.
Kitai, H. 7107.
Kitajima, E.W. 6224.
Kitamura, K. 915.
Kitamura, T. 3251.
Kitano, H. 6032.
Kitano, K. 4837, 7141, 7461.
Kitao, T. 3989, 4780.
Kitazume, Y. 4260.
Kitchen, B.J. 22.
Kitchen, N.A. 2564, 6928.
Kitchens, J.F. 2403, 7511.
Kitov, S. 7793.
Kittler, G. 7420.
Kizits, I.D. 4792.
Kiyosawa, S. 5493.
Kjaergaard, L. 3613.
Kjellander, L. 717.
Klaenhammer, T.R. 3716, 4170, 4457, 9203.
Klapes, N.A. 1822.
Klarer, C.I. 8992.
Klass, D.J. 4116.
Klastersky, J. 8344, 8356.
Klaue, D. 566.
Klausner, A. 6077.
Klayman, D.L. 7372.
Klebe, R.J. 9275.

- Kleg, M. 4327.
Kleid, D.G. 4075.
Klein, C.S. 6761.
Klein, D. 4274, 6832.
Klein, D.A. 8983, 8985, 9029.
Klein, G.C. 699, 2494.
Klein, J. 6, 763, 1003, 1868, 2675, 4373.
Klein, M. 1347.
Klein, R.E. 8001.
Klein, R.S. 2260.
Kleiner, H. 2683.
Kleinkauf, H. 3132, 7780, 8379.
Kleiner, P. 6056.
Klemenc, N. 7048.
Klemme, J.H. 4318.
Klen, H.D. 8606.
Klepel, M. 4735.
Klesel, N. 4357.
Klesov, A.A. 3683, 4302, 5973, 6040, 7766.
Kleven, S.H. 5022, 5078, 7486.
Klibanov, A.M. 554, 5846, 7769.
Klibansky, M.M. 801.
Kliemann, W. 7438.
Kligerman, A. 2629.
Klimanek, E.-M. 2179.
Klimenko, M.T. 7319.
Klimyk, S.I. 7315.
Klimov, A.I. 5808, 7482.
Klimova, N.E. 483.
Kline, D.L. 3573.
Kline, G. 8722.
Kline, J.B. 5085.
Kline, P.C. 3974.
Kline, S.J. 448, 8335.
Klinger, J.D. 3170.
Klinger, W. 4213.
Klinot, J. 4739.
Klostein, F.A. 7123, 8749.
Klikenko, G.A. 7570.
Klisko, B. 4980.
Kloocking, R. 464.
Klopper, J.W. 4639.
Kloos, W.E. 3273.
Klosterman, J.J.V. 3523.
Klopfenstein, T.J. 2747.
Klostermeyer, H. 1805, 1909.
Klotz, L.C. 3423.
Klotz, M. 3048.
Klozowski, M.J. 7790.
Klozowski, S.M. 2022.
Klug, S. 285.
Klugkist, J. 2608, 4644.
Kluze, L.J. 5533.
Klutch, M.J. 5003.
Kluwe, B. 36.
Klyachov, A.A. 882, 4344, 4355, 4441, 5166.
Klyshch, L.K. 6009.
Knackmuss, H.-J. 182, 2718, 3449, 8393.
Knackmuss, H.J. 3207.
Knapp, E.B. 2699.
Knapp, J. 424.
Knapp, J.S. 679, 772, 1658, 7627.
Knapp, R.M. 5265.
Knauft, D.A. 3793.
Kneifova, J. 456.
Knepper, R.G. 8919.
Knezeck, B.D. 6347.
Knerzinger, A. 7466.
Knight, D.P. 2507.
Knight, P.R. 6474.
Knight, R.D.J. 727.
Knight, W.E. 2783.
Knights, J.M. 4481.
Knittel, M.D. 398.
Knoche, H.W. 1955, 5024, 7911.
Knoll, H. 1956, 2764, 8752.
Knoll, K.H. 2370.
Knoll, D.A. 309.
Knorr, H. 4716.
Knott, D.R. 5258, 314, 315, 6293, 7972.
Knous, T.R. 5494.
Knowles, B.H. 5387.
Knowles, C.J. 1877, 3665, 6044.
Knowles, J.R. 9161.
Knowles, R. 2999, 8585.
Knowles, R.C. 4037.
Knowlton, S. 4600.
Knorr, J.R. 1780, 3457.
Knudson, J.C.N. 2839.
Knudson, D.L. 4148.
Knyazeva, L.V. 1278.
Ko, N.J. 8825.
Ko, W.H. 397.
Ko, Y.T. 8817.
Kobaru, S. 1702.
Kobaczewski, J. 1771.
Kobatake, M. 5340, 5343.
Kobayashi, F. 7479.
Kobayashi, H. 62, 4090, 7112.
Kobayashi, H.A. 4126.
Kobayashi, J. 9122, 9123.
Kobayashi, M. 2615, 5993, 7818, 8574.
Kobayashi, R. 1206, 2616.
Kobayashi, S. 729, 2308.
Kobayashi, T. 205, 854, 1759, 1777, 1792, 4290, 5104, 7111.
Kobayashi, Y. 932, 7680.
Kobayshi, T. 6570.
Kobinata, K. 3136.
Kobinger, K. 7939.
Kobza, S. 7949.
Kobzeva, N.A. 2572, 6875.
Kobzeva, V.K. 2277.
Koch, B.L. 3942.
Koch, H.U. 4266.
Koch, J.R. 8422.
Koch, L.W. 1577.
Koch, M. 3981.
Koch, W. 7917.
Kocher, W. 2376.
Kocher, W.M. 1483.
Kochetkov, N.K. 4362, 6050.
Kochhar, S. 4515.
Kochi, K.E. 8219.
Kochmak, O.I. 4901.
Kochman, J.K. 8014.
Kocienski, P. 5396.
Kocis, P. 8614.
Kockenova, M.M. 4044.
Kockova-Kratochvilova, A. 4222, 6789, 6816.
Kocoon, J. 2742.
Kocoury, J. 226, 3480.
Koda, S. 1434.
Kodaka, H. 794, 1576.
Kodama, K. 2310.
Kodama, T. 2553.
Kodama, Y. 2295.
Kodera, Y. 570.
Kodind, G.Kh. 4928.
Koehler, H. 5020.
Koehler, M. 8274.
Koehler, P.E. 5251.
Koehler, W. 1956, 2764, 8752.
Kogala, G. 719.
Kogelnik, W. 4374.
Koenig, J. 7568.
Koenig, R. 234, 4540, 4544.
Koenig, W.A. 4065, 8377.
Koeppen, B. 3762.
Koeppel, P.A. 254, 5468, 8795.
Koeppenblatt, E.K. 683.
Koester, K.E. 3477.
Koetting, J. 7747.
Koga, J. 3467.
Koga, T. 8616.
Koguch, R. 1735.
Koguch, R.G. 3490.
Koh, C.-L. 5709.
Koh, S.-S. 2553.
Koh, K.H. 4410.
Kohbata, S. 3024.
Kohiyama, M. 8368, 7673.
Kohl, D.I. 2169.
Kohl, W. 2247, 3130, 4485, 9209.
Kohler, R.B. 7622.
Kohli, E. 5769.
Kohlshorn, H. 8372.
Kohmoto, K. 5393.
Kohn, R. 8595.
Kohn, M. 4376.
Kohsaka, M. 3103, 6566.
Kohzuki, E. 574.
Koida, M. 3109.
Koidis, P. 4459.
Koike, T. 7700.
Koizumi, K. 948.
Koiso, H.N. 5965.
Koizumi, J. 8502, 9296.
Koizumi, J.I. 8543.
Koizumi, M. 2200, 7480.
Koizumi, K. 7477.
Koizumi, N. 2286, 5905.
Koizumi, N. 8560, 8561.
Koizumi, T. 455, 9321.
Kojo, H. 2316.
Kokubo, S. 3988.
Kokko, E.G. 7933.
Kokubun, S. 8627.
Koland, J.G. 4273.
Kolattukudy, P.E. 2617, 8852.
Kolawole, D.O. 7329.
Kolber, A.R. 3388.
Kolchinskaya, I.D. 921.
Kole, M. 5269, 6125.
Koleda, I. 8906.
Kolesnikov, M.P. 916.
Kolesnikov, V.A. 2557.
Kolesov, Yu.F. 4899.
Kolsky, V.M. 2320.
Kollig, H.P. 8437.
Kollmorgen, J.F. 6351.
Kolman, J.M. 4164.
Kolmer, J.A. 2780, 2850.
Kolot, F.B. 5375.
Kolpak, M.X. 5352, 1423.
Kolstad, J. 95.
Kolts, S. 1854.
Koltukova, N.V. 4337, 7732.
Komal, S.P. 1932.
Komal, H.S. 8819.
Komanov, T. 1351, 6560.
Komar, J. 5433.
Komarova, N.I. 8341.
Komarov, E.V. 6577.
Komarov, T.I. 966, 7312.
Komarovskaya, T.P. 2685.
Komatsu, S. 2630.
Komatsu, T. 3251, 7432.
Komoros, S.D. 9251.
Komiyama, K. 1441.
Komiyama, T. 7674.
Kommedahl, T. 1692, 7967.
Komori, T. 1434, 1435, 3103, 6566.
Komov, V.P. 924, 5979.
Komura, S. 1419.
Kon, K. 4372.
Konate, G. 6264.
Konde, B.K. 7277.
Kondo, H. 3483.
Kondo, K. 6843.
Kondo, M. 517, 2555, 3115.
Kondo, S. 7459.
Kondo, Y. 4863.
Kondrosi, A. 442.
Kondratyeva, E.N. 5.
Kondratyeva, T.F. 947.
Konrai, H. 4911, 4315.
Kong, H.-L. 3682.
Koniecz, J. 3348.
Konickova-Radochova, M. 3348.
Konishi, H. 1373.
Konishi, J. 6153.
Konishi, K. 2291, 4178.
Konishi, M. 1702, 6067, 6890.
Konno, M. 5165.
Konno, T. 3233.
Kono, H. 7111.
Kono, R. 1580.
Kono, Y. 1952, 1955, 3733.
Kononko, T. 6521.
Konopinska, D. 3120.
Konopka, E.A. 6512.
Kononov, S.A. 883, 1883, 3508, 6942.
Kononova, L.V. 857, 3436.
Konrad, M. 3524.
Koniska, G. 9201.
Konstantinov, G. 2459.
Kontaxis, D.G. 1225.
Koo, C.D. 5567.
Koo, S.Y. 2531.
Koopman, B. 2331.
Koopman, B.L. 2343.
Koorhof, H.J. 3760.
Kopeck, L.K. 7471.
Kopecka, H. 8363.
Kopelova, M. 9334.
Kopelovitch, E. 2011.
Kopp, B. 969.
Koprowski, H. 6632.
Koraem, A.I.M. 7393.
Korbuly, J. 8906.
Korchagin, V.B. 4689.
Kordyum, V.A. 5910.
Kore, S.S. 2086.
Korganov, Ya.N. 7398.
Korkeala, H. 7578.
Kormanik, P.P. 825.
Korneva, E.P. 6440.
Kornikamhaeng, P. 8804.
Korobkova, T.P. 2313, 4064.
Korolev, N.V. 2276.
Koroleva, I.F. 5239.
Koroleva, O.V. 927, 5982.
Korolyuk, A.M. 9101.
Korotkiy, T.V. 9678, 7312.
Korotkov, S.A. 1678.
Korotyaev, A.I. 4694, 4699.
Kort, A.A. 1753.
Korus, R.A. 157, 8655.
Korych, B. 641.
Koryuk, J. 3277.
Korzis, J. 30.
Kos-Kuyck, E. 5730.
Kosaka, K. 7107.
Kosakai, N. 3018.
Kosaric, N. 1878.
Koshchenko, K.A. 104.
Koshi, T. 7479.
Koshiji, H. 3560, 3561, 4399, 6096, 6097, 6098.
Koshimizu, K. 1673.
Koshiro, A. 8353, 6452.
Koshy, A.A. 4984.
Koshy, M. 8437.
Kosinska, E. 9236.
Koske, R.E. 6349.
Koski, T.A. 1348, 6756, 7395.
Kosovskikh, V.L. 4396.
Kossov, N.W.F. 2427.
Kossiak, R. 2967.
Kossiak, R.M. 408, 8997.
Kosson, D.S. 4084.
Kostareva, I.A. 881, 4301.
Kostenbader, K.D. 5013, 9266.
Kostenbauder, H.B. 1359.
Kostenko, V.F. 4902.
Koster, W.H. 6583.
Kostrikin, N.A. 6882.
Kostyukova, N.N. 9222.
Kosuge, T. 4558.
Kosunen, T.J. 3318.
Kotari, H. 2308.
Kotarski, S. 5820.
Kotchen, J.F. 1460.
Kotenko, S.P. 7813.
Kotenko, S.T. 4417.
Koteswara Rao, G. 2035.
Koths, K.E. 3498.
Koti Reddy, M. 5646.
Kotimaa, M. 8195.
Kotim, M. 9284.
Kotsides, E. 4445, 4448.
Kott, Y. 6750.
Kotula, A.W. 8721.
Kondo, M. 517, 2555, 3115.
Kotze, J.M. 8120.
Kou, X.F. 78.
Koul, A.K. 1541.
Koupal, L. 774.
Koupletiskaja, M.B. 5.
Kourai, H. 2218, 7527.
Kouri, T. 2558.
Kouri, Y. 2429.
Kovach, J.M. 742.
Kovackiva, E. 241.
Kovacs, M. 3901.
Kovalenko, K. 1068.
Kovalenko, N.K. 1064.
Kovalenko, T.V. 7301.
Kovalenko, V.A. 4900.
Kovanova, E.N. 6439.
Kovashova, I.N. 3128.
Kow, Y.W. 8858.
Kowalska, J. 7508.
Kowalski, T. 2105, 2924, 5609.
Kowbel, D.J. 4903.
Koya, H. 3531.
Koya, K. 112.
Koyama, H. 5150.
Koyama, M. 2285, 2286, 2287, 2295, 4863.
Koyama, T. 6863.
Koyama, Y. 7478.
Koyatani, K. 4263.
Kozachuk, K.K. 6802.
Kozaki, M. 4198.
Kozawa, M. 7384, 8309.
Kozhevnik, P.A. 1272, 7282, 8233, 9012.
Kozina, T.N. 9333.
Kozlov, A.I. 5398, 6054.
Kozlovich, E. 2011.
Kozlov, Y.N. 3277.
Kozlova, E.V. 2208, 6034, 6822, 7351.
Kozlovskiy, A.G. 7888.
Kozma, P.J. 8908.
Kozono, T. 3736.
Kozub, G.C. 7998.
Kraemer, J. 1418.
Kraepelin, G. 3132.
Kraeva, N.K. 857.
Kraft, A.A. 7886.
Kraft, C.A. 2204.
Kraft, J.M. 338, 1201, 6287.
Kraiselburd, E. 2429.
Kraiden, S. 9162.
Kraide, L.R. 3816, 4536, 8859.
Krailek, J. 6021.
Kraivola, K. 9075.
Kralova, S. 2618.
Kralovcova, E. 6565.
Kramarov, V.M. 1741.
Krambovitis, E. 3351.
Kramer, C.D. 3957, 5417.
Kramer, D.M. 74.
Kramer, J.F. 3491.
Kramer, J.P. 138.
Kramer, R.E. 8418, 9319.
Kramer, S.M. 8442.
Kramer, V.C. 1859, 7339, 7549.
Krane, J. 5986.
Kranz, G. 1042.
Kranz, J. 2866.
Kranza, J. 6246.
Krasnaswamy, S. 4813.
Krasnik, V.N. 8485.
Krasnik, T.N. 4358.
Krasnik, V.N. 5089.
Krasniak, S.R. 3491.
Krasnoblizny, N.A. 6802.
Krasnova, E.F. 1344.
Krasnova, N.I. 7562.
Kratka, J. 7918.
Kratzer, F.H. 2750, 2751.
Krauel, H.H. 6169.
Krauel, U. 6169.
Kraus, J.F. 5591.
Krause, P.J. 8438.
Krauss, E.M. 1409.
Krauss, H. 728.
Krausz, J.P. 3852.
Kravets, V.V. 4901.
Krawczyk, M. 9201.
Kromeny, V. 4716, 5715, 9043.
Kromeny, V.Jr. 9076.
Krebs, D. 533.
Krebs, L.F. 2214.
Krebs, U. 1020.
Kreft, J. 4297.
Kreger, A.S. 7676.
Kreih, R.E. 8931.
Kreibich, G. 1042.
Kreiger, R.A. 6965.
Kreller, G. 7626.
Kremienkova, P.P. 413.
Kress, M. 4941.
Kressdorf, B. 2675.
Krest'yanov, I.I. 4288.
Krestynski, F. 2573.
Kretovich, V.L. 9022.
Kretschmer, A. 978.
Kreva, N.K. 3436.
Krieg, A. 3569.
Kriehn, J. 1255, 6337, 7183.
Krishna Kumari, C. 7894.
Krishna Rao, M. 5196.
Krishna, R.R. 5641.
Krishnamoorthi, K.P. 4093.
Krishnamoorthy, R.V. 7265.
Krishna, R. 1521.
Kristensen, G.H. 2356.
Krstuek, V. 4674, 4737.
Kritzman, G. 326.
Krobova, A.Yu. 6573.
Krobova, J.F. 9251.
Krober, H. 1154.
Kroekel, L. 8237.
Kroenert, W. 5366, 5367.
Kroening, U. 7354.
Krogh, P. 224, 7060.
Krogulskaya, B. 6678, 7406.
Krome, M. 6900.
Kroicha, Y.G. 4774.
Krolak, M. 7589.
Krolikovska, K. 5773.
Kroll, S. 1809.
Kroll, S.J. 6543.
Kroll, T.K. 8867, 8912.
Kroner, K.H. 61, 3427, 4303, 4306, 8586.
Kronvall, G. 1400, 4828.
Krook, M.A. 6582.
Kroon, J.C. 7127.
Kroon, W.A. 4953.
Kroon, L. 1393, 1957, 71.
Krovak, P. 5874.
Kropova, N. 4164.
Krueger, W. 1042.
Krueger, W. 2814, 2903, 795.
Kruglyak, E.B. 2766.
Krugman, S. 6747.
Kruil, L. 3472.
Krumbein, W.E. 8205, 8207, 8438, 9318.
Krumphanzl, V. 1708, 6565.
Krupinsky, J.M. 1134.
Kruze, C.W. 4938.
Krutli, H. 6468.
Krylov, A.S. 8562.
Krylova, N.I. 1063, 3728, 692.
Krynskiy, J. 9135.
Krysio, R.J. 796.
Krysio, J. 9132.
Kryzky, J.A. 3521.
Kryzanska-Padzak, E. 1812.
Kryzanski, Z. 5454.
Ksono, K. 1433.
Kuan, K.N. 66.
Kuanetsova, O.S. 2318.
Kubak, B. 6806.
Kubanek, V. 15, 6021.
Kubes, V.J. 3252.
Kubesova, V. 3252.
Kubis, A. 6468.
Kubo, I. 1605.
Kubo, K. 938.
Kubo, M. 1632, 4797, 7384.
Kubo, N. 941, 3458, 6006.
Kubo, S. 6213.
Kubokura, Y. 1059, 1060, 10.
Kubota, H. 4923, 5841.
Kubota, K. 1161.
Kubota, Y. 577.
Kucera, J. 5125, 5999.
Kucey, R.M.N. 2138.

- Kucharski, S. 9132, 9135.
Kuchenther, R.D. 1485.
Kuchta, F. 7944.
Kuchta, J.M. 1327.
Kuo, N.A. 3154.
Kucnerowicz, F. 1491, 2932.
Kuzemski, D. 592.
Kudela, V. 7928.
Kudelova, A. 3879.
Kudinova, M.K. 3128.
Kudinova, T.I. 7332.
Kudicki, W. 3456.
Kudr, D. 894.
Kuznetsov, O. 4955.
Kudryashov, L.I. 947.
Kudryashov, M. 1016, 1017.
Kues, U. 2552.
Kuek, C. 8544.
Kuenen, J.G. 1598.
Kuepper, A. 6983.
Kuipers, F. 6411.
Kuiperschneider, E. 7917.
Kufe, D. 3067.
Kugel, G. 2351.
Kuhman, E.G. 6326, 6327.
Kuhmann, W. 6121.
Kuhl, C.W. 2777.
Kuhn, M. 150.
Kuja, A.L. 4554.
Kui, M. 4393.
Kukla, B. 4512.
Kula, M.-R. 61, 3427, 4306, 7733.
Kula, M.R. 61, 4033, 8586.
Kulakov, I.S. 4309.
Kulihavy, D.L. 8182.
Kulicka, J. 320.
Kuliff, M. 3834.
Kulik, M.M. 7129.
Kulikov, A.K. 4350.
Kulinsk, D. 4658, 4665.
Kulis, J.J. 7722.
Kulkarni, J.H. 4646.
Kulkarni, K. 1303.
Kulp, K. 5332.
Kulsky, L.A. 4901, 4942.
Kulyaeva, V.V. 3128.
Kumagai, H. 1817, 6061.
Kumakura, M. 1044, 1759, 3466.
Kumakura, M. 4330, 5178, 5896, 6027, 6949.
Kumar Rao, J.V.D. 6232.
Kumar, A. 3039.
Kumar, C. 7755.
Kumar, D. 767.
Kumar, J. 298, 3867, 8831.
Kumar, K. 8837.
Kumar, N.G. 2279.
Kumar, P. 8017.
Kumar, R. 145.
Kumar, S. 5002.
Kumar, S.D. 5788.
Kumar, V. 6383.
Kumas, N. 1539.
Kumazawa, K. 2956, 2992.
Kumazawa, S. 3582.
Kume, T. 5359.
Kumert, J. 4581.
Kumf, F. 8389, 8391.
Kundrot, C.E. 2587.
Kundu, B.S. 3967.
Kundu, S. 8514.
Kundya, T.M. 3795.
Kung, L.Jr. 3723.
Kuninaka, A. 1799, 2574.
Kunkel, R. 2681.
Kunkel, M. 2229.
Kuno, G. 639.
Kuno, M. 517.
Kunoh, H. 2892.
Kunstman, J.L. 259.
Kuntz, J.E. 1138, 7991.
Kunugi, M. 5245.
Kunze, B. 7840.
Kunz, D.A. 7828.
Kunz, L.J. 3280, 3378.
Kunze, B. 2231.
Kunze, G. 1800.
Kuo, C. 2455.
Kuo, G. 6628.
Kupo, J. 4094.
Kuper, V. 2257.
Kupina, S.A. 6939.
Kurahashi, K. 1419.
Kurayoshi, A.V. 1230.
Kuravova, N.G. 8232.
Kuramitsu, H.K. 109.
Kurantz, M.J. 202.
Kurata, H. 5340, 5343, 6798.
Kurata, M. 3537.
Kuratsu, Y. 1424, 3148, 4880, 7681.
Kurayoshi, A.V. 1300.
Kureishi, A. 761.
Kurganov, B.I. 4313.
Kurganov, D.K. 7966.
Kurimura, O. 1552.
Kurimura, T. 1552, 5012.
Kuritsky, J.N. 4196.
Kurkjian, A. 7110.
Kurkela, R. 1905.
Kurkela, T. 5601.
Kurtaev, P.P. 6585.
Kurum, T. 1386.
Kurume, H. 6887.
Kuro, Y. 7682.
Kurosawa, S.I. 1764, 5979.
Kuroshima, T. 2947.
Kurtz, J.B. 4156, 4933.
Kurtzmann, C.P. 3596.
Kurtz, V.P. 5930.
Kurylyak, Ye.K. 2143.
Kuskakabe, H. 38, 1799, 2574, 3136, 7853.
Kuskakabe, I. 1745, 4295, 8604.
Kusel, J.P. 4401, 6094.
Kushak, A.A. 2328.
Kushner, D.J. 6437.
Kusters, J. 8612.
Kusunoki, K. 113.
Kusunoki, M. 2625.
Kuter, G.A. 290, 6300, 8846.
Kuti, J.O. 5472.
Kutmin, A.I. 6451.
Kutney, J.P. 2708, 4430.
Kutroch, V. 1834.
Kutsemako, R.T. 8306.
Kutsaki, H. 3663.
Kutsuzawa, T. 3233.
Kuusisto, P. 4932.
Kuwa, T. 3537.
Kuwanara, M. 1437, 6861, 8315.
Kuwahara, S. 2316.
Kuwano, H. 519, 2302.
Kuwaata, T. 7390.
Kuwatsuka, T. 3150.
Kuyama, S. 9207.
Kuze, F. 3045.
Kuzs, Y. 2308.
Kuzmenok, V.A. 1411.
Kuznetsov, L.E. 1613, 7603.
Kuznetsov, V.D. 1006, 6155.
Kuzovkov, A.D. 4058, 6580.
Kvach, T.I. 7582.
Kvasnikov, E.I. 921, 1064.
Kvernland, S.J. 441.
Kvesitadze, G.I. 4344, 5973.
Kwan, K.K.H. 7849.
Kwan, S. 4696.
Kwata, M.S. 1071.
Kwiatkowska, A. 7856.
Kwiatkowska, G. 5123.
Kwiatkowski, A. 5486.
Kwolek, W.F. 8724.
Kwon-Chung, K.J. 809, 2645.
Kwon, S. 72.
Kyle, W.S.A. 5952, 8702.
Kyllingsbaek, A. 2964.
Kyndt, J. 355.
Kyono, K. 9322.
Kyriakidis, D.A. 2588, 2655.
Kyselova, M. 7568.
Kyslik, P. 3444, 3505, 6821.
Kyung, K.H. 3506.
Kyurana, A.L. 5650.
Lafarge-Frayssinet, C. 7097.
Lafarina, R. 4762.
Lafferty, R.M. 5098.
Lafon-Lalourcade, S. 173, 3625, 5279, 5286, 6134, 6936.
LaForce, F.M. 3226, 5859.
Lafrance, P. 553.
Lagat, M. 2641.
Lagel, P.F. 8570.
Lago, B. 8380.
Lagoda, A.A. 3645.
LaGrega, M.D. 4244.
Lagu, A.L. 1396.
Lahellec, C. 8565.
Lahiri, A.N. 4670.
Lahit, R. 5154.
Lal, C.-Y. 6604.
Lal, C.-Y. 1085.
Lal, M. 275.
Lal, M.M.C. 7387.
Laidlaw, D.M. 1122.
Laidler, K.J. 14.
Laires, A. 4331.
Lairsey, R.G. 4728.
Lajczuk, N. 6323.
Lake, J.A. 3220.
Lakey, J.H. 2296.
Lakshmi, V.V. 8305.
Lakso, A.N. 8833.
Lal, B. 8876.
Lal, B.B. 3516.
Lal, S. 8127.
Lal, S.P. 8048.
Lal, S.C. 1363, 8715.
Lally, R.T. 479, 1408, 4714, 5778, 7586.
Lalonde, M. 4595, 4601, 4602, 8154.
Laloux, C. 6146.
Lam, J. 3060.
Lam, K. 4814, 7423.
Lamb, C.H. 4637.
Lambe, C.U. 4029.
Lambe, R.C. 8912.
Lambert, G. 24.
Lambert, H. 2572.
Lambert, C. 1751, 8572.
Lambert, P. 5748.
Lambert, K.J. 2187.
Lambert, M.G. 8187.
Lambert, P.A. 9069.
Lambert, R.W. 6587.
Lambert, T. 9327.
Lamby, L.A. 6591, 6616, 8386.
Lambert, L.B. 441.
Lamberti, F. 3396.
Lamberts, B.L. 4140.
Lambowitz, A.M. 2534.
Lamed, R. 5162, 5217.
Lamondia, J.A. 5224.
Lamont, P. 2306.
Lamotte, F. 6499.
Lamotte-Brasseur, J. 5985.
Lamp, R.P.M. 481.
Lampky, J.R. 1482.
Lampont, D.T.A. 7205.
Lampre, R.S. 4310.
Lamprecht, H. 7136.
Lamy, D. 6594.
Lanari, D. 7877.
Lancaster, J.R., Jr. 6203.
Lance, C. 2795.
Lance, J.C. 3831, 4934.
Lancou, N.S. 916, 6882.
Landau, W. 736.
Landegent, J.E. 9282.
Landine, R.C. 7520, 8273.
Landini, M.P. 1551.
Landry, E. 8072.
Landry, S.L. 3578.
Lane, A.G. 4117, 6899.
Lang, S. 6, 2440, 5221, 7777.
Langar, P.N. 3586.
Lange, E. 2716.
Lange, S. 4487.
Langen, P. 4763.
Langenberg, W.G. 4522.
Langenbruch, G.A. 3569.
Langenheim, J.H. 5506.
Langer, R. 8865.
Langerman, N. 5913.
Langford, M.P. 2227.
Langie, R. 6948.
Langkamp, H.H. 9181.
Langlais, B. 2371.
Langley, T.J. 46.
Langlois, B.E. 1317, 1907, 1910, 3033, 3730, 4466, 5711, 7857, 8295.
Langlois, R.G. 3287.
Langolis, B.E. 2197, 3271.
Langowska, I. 2191.
Langpaulova, I.J. 3607.
Langridge, R. 4323.
Langridge, W.H.R. 6905.
Langsdorf, M.L. 6017, 6018.
Langsrud, T. 2733.
Lannigan, R. 5045.
Lantos, Z. 6700.
Lanyi, B. 4939.
LaPat-Polasko, L.T. 3661.
Lapeyre, C. 1942.
Lapikova, V.P. 8889.
Lapina, I.K. 7411.
Lapis, B.D. 7202.
Lappe, P. 2126.
Lapwood, D.H. 2026, 2027, 4581, 5483.
Lapworth, M.A. 658.
Lara, Y. 86.
Lard, B.A. 5723.
Largajolli, R. 893.
Larje, P.J. 6941.
Larget-Thierry, I. 127.
Larher, F. 2159.
Larinaki, U. 7620.
Larsonov, V.L. 3333.
Larso de Andra, G. 1716.
Laros, G. 86, 3415.
Lariviere, S. 2516, 2520, 7593.
Larkin, E.P. 2335.
Laroche, A. 6930.
Larokhmi, V.V. 8305.
Laroche, M. 5441, 7029.
Larone, D.H. 683.
Larosielle, R.C. 6380.
Larsen, A.K. 8865.
Larsen, E.H. 3288.
Larsen, K. 5980, 7724.
Larsen, P.O. 1999.
Larsen, R.C. 1150, 3241.
Larsen, S.A. 2453, 2511.
Larsen, V.F. 664.
Larsh, H.W. 1660.
Larson, A.D. 1590.
Larson, C.H. 4637.
Larson, P.A. 3221.
Larson, R.J. 1037, 5311.
Larsson, A. 460.
Larsson, L. 4212.
Larsson, M. 3659, 3687.
Larsson, P. 3068.
LaRue, D. 566.
LaRue, T.A. 2162, 2164, 2975.
Lasauquiere, C. 1778.
Lassan, J. 4296.
Lasik, J. 114, 6389.
Lasik, L.A. 6591, 6616, 8386.
Lasota, T. 1894.
Lassen, J. 4040.
Last, F.T. 5551, 5556, 5557.
Lastick, S.M. 7806.
Lastra, R. 6265.
Laszlo, A. 3051.
Laszlo, T. 8921.
Laszlo, T. 7077, 7096.
Latachney, R.L. 898.
Lategan, P.M. 985, 3197.
Later, D.V. 5317.
Laterior, H. 3856.
Latge, P.J. 4310.
Lathley, J.L. 605.
Lathrop, L.D. 8811.
Latif, M.S. 9142.
Latif, Z. 1563.
Latimer, J.M. 486.
Latone, B.A. 1200.
Lattrell, F.M. 7983, 8794.
Latture, G. 5229.
Latunde-Dada, A.O. 2884.
Lau, P.-Y. 3737.
Lau, P.Y. 5372.
Laube, V.M. 2186, 5223, 7782.
Laufer, B.A. 703, 1556, 1608.
Laufer, B.R. 5177.
Laughton, B.E. 230, 6216.
Laurence, J.A. 7133.
Laurent, G. 6832.
Laurent, M. 6007.
Laurent, P. 8635.
Laursen, G.A. 2129, 2546.
Lausensach, A. 3627.
Laauwers, L. 5444.
Lauzon, H. 3570.
Lavender, D.P. 5675.
Lavenex, A. 5726.
Lavers, B. 2629.
Lavery, C. 2429.
Lavery, R. 1955.
Lavin, D. 2046.
Lavola, C. 2615.
Lavrenova, G.I. 2584.
Lavrik, O.I. 5995.
Law, B.I. 6362.
Law, J.F. 682.
Law, J.H. 8329.
Lawford, G.R. 2629, 6935.
Lawford, H.G. 1836, 2629, 3615, 8621.
Lawkes, D.L. 5824.
Lawley, R.A. 372.
Lawrence, G.A. 7050.
Lawrence, G.C. 5255.
Lawrence, K. 5766.
Lawrence, R.C. 7861.
Lawrence, R.W. 3001.
Lawrence, Z. 3384.
Lawrie, R.A. 4233.
Laws, I. 7043.
Lawson, D.L. 7222.
Lawson, G. 1299.
Lawson, V.F. 2828, 2829.
Lawton, W.D. 1577, 3300.
Layman, M.A. 7577.
Lazar, L. 2406.
Lazarole, D. 8293.
Lazarovich, P. 7908.
Le Calve, P. 6675.
Le Cars, D.V. 1582.
Le Cloirec, P. 6698.
Le Cocq, J.P. 5807.
Le Cocq, P. 5984, 5988.
Le Frock, L.J. 2458.
Le Goffic, F. 5787, 5790.
Le Noc, P. 9095.
Le Roux, A.-Y. 2349.
Le Roux, J.Y. 7512.
Le Rudulier, D. 5354.
Le Ruyet, P. 8671.
Le Tacou, F. 8163.
Le Tourneau, D. 8310.
Le van Thoi, J. 6541.
Le, C. 636.
Le, K.H.D. 2591.
Lea, E.J. 479.
Leach, C.M. 7143, 7914, 7925.
Leach, R.H. 6756.
Leach, S.S. 8826.
Leahy, T.J. 1365, 8505.
Leak, D.J. 3007.
Leahy, G. 5881.
Leal, N. 6265.
Leanza, W.J. 6536.
Leas, D.W. 2389, 9242.
Leath, K.T. 1116, 1118.
Leatham, G.F. 823, 1879.
Leblanc, G. 5881.
Lebeault, J.-M. 4423, 5106.
Lebeault, J.M. 3506, 4334.
Lebeda, A. 3836.
Lebedeva, E.V. 9031.
Lebel, G. 2206.
Leblanc, R. 9091.
Leblanc, D. 7593.
LeBlanc, D.J. 6431.
LeBrun, R.A. 5213.
Lechevalier, M.P. 4598.
Lechevalier, M.W. 8415, 8417, 8421.
Leclerc, H. 1388, 4827.
Leclerc, M. 6955.
Leclerc, J. 6647.
Leclerc, H. 3856, 5478.
Lederer, F. 2591.
Ledesma, G. 30.
Ledford, R.A. 3692, 9445, 4448.
LeDun, J. 1292, 1293, 6055, 6930, 8533.
Ledward, D.A. 4233.
Lee, A. 7587, 9162.
Lee, B.H. 5363, 8715.
Lee, B.K. 2294.
Lee, C. 6979.
Lee, C.W. 6993.
Lee, D. 648.
Lee, D.-H. 8036.
Lee, D.T. 6123.
Lee, E.C. 8210.
Lee, F.K. 653.
Lee, G. 904.
Lee, G.M. 4054, 5083, 8663.
Lee, H.Y. 9304.
Lee, I.-M. 281, 1570, 3266.
Lee, J. 519, 1023, 2978.
Lee, J.C. 3821.
Lee, J.H. 599.
Lee, J.M. 18.
Lee, J.V. 3760.
Lee, J.W. 5057.
Lee, J.T. 2694, 5567, 5850, 6108, 7795, 8663.
Lee, L.-J. 5345.
Lee, L.S. 1932, 3746.
Lee, M. 3981.
Lee, M.L. 5317.
Lee, N.E. 2337.
Lee, R. 280.
Lee, R.T., III. 2211.
Lee, S.E. 2343.
Lee, S.B. 84, 3403.
Lee, S.S. 3402, 3619.
Lee, S.W. 538, 3185.
Lee, T.C. 8613.
Lee, T.H. 7398.
Lee, Y.-H. 3658.
Lee, Y.C. 2580, 6438.

- 08.3194,
 tmann, R. 5963.
 tion, G.G. 1855.
 trol, B. 7594.
 ttrell, E.S. 1101, 3839.
 t, W. 4098.
 t, B. 1824.
 tion, D.E.A. 6419.
 zkhov, A.M. 5061, 6769.
 ande, W. 4738.
 alskova, N.N. 9031.
 arskij, P.P. 8341.
 t, S.D. 329, 5437, 5523, 8009.
 okov, V.P. 780.
 che, P.A.S. 3324.
 nle, D. 7336.
 nch, J.E. 3121.
 nch, J.M. 1203, 2930, 2936,
 3366, 3936, 4627, 5687, 6051,
 6179.
 nch, J.R. 3274.
 nn, B. 9137.
 n, B.E. 3249.
 on, B.E. 2738.
 on, C.G. 1049, 2738.
 ons, B.J. 2350.
 ons, C.D. 9868.
 on, C.D. 1622, 6111.
 isen, L.V. 3954.
 senko, O. 4390.
 shol, A.J. 8116.
 skanowska, M.K. 5438.
 tion, P. 2976.
 uchachy, L.V. 6776.
 ublinskaya, A. 5136.
 ubovitskaya, O.V. 1074.
 udnikova, T.A. 4405.
 a, M. 7561.
 a, S. 9479.
 a, S. 3977.
 a, X.K. 7905.
 a, X-K. 1948.
 arntson, A.M. 4174, 9011.
 as, E. 3129.
 as, H.M.E. 2506.
 as, H. 6867, 8841.
 as, H.F. 6602, 8614.
 at, D.Z. 2043, 8314.
 agalilae, M. 3020.
 agallanes, M. 9026.
 agan, N. 5371, 8050.
 agasani, K. 4281.
 agadi-Din Hussein, M. 2189.
 agau, R.P. 3110.
 agee, J.T. 2498.
 Maggi, A. 8709.
 Maggio, R.C. 8189.
 Magliani, W. 3345.
 Magagnelli, L.A. 2665.
 Magnus, C.A. 8667.
 Magnusson, N.S. 6212.
 Mago, M.L. 3042.
 Magrath, D.I. 6590.
 Magrini, R.C. 6960.
 Mager, P. 2010.
 Mahadev, B.S. 1056.
 Mahadevan, P.R. 4855.
 Mahadevan, S. 9035.
 Mahajan, P.B. 3512.
 Mahanta, I.C. 5504.
 Mahato, S.B. 6049.
 Maheswaran, K.S. 6751.
 Mahomed Khan, S. 7870.
 Mahmood, M. 7767.
 Mahmood, S.A.Z. 3972, 7284,
 8229, 8990.
 Mahmud, A.W. 2523.
 Maholay, M.N. 5039.
 Mahomedy, A.Y. 7776.
 Mahoney, A.W. 7035.
 Mahoney, W.E. 804, 8925.
 Mahoney, M. 9262.
 Maho, A. 7481.
 Mahanta, H. 932.
 Machitlenok, L. 7667.
 Mack, H.J. 8795.
 Mack, D.K. 7336.
 Mackay, J.M. 1195.
 Mackel, D.C. 581, 6723, 7539.
 Macken, S. 3859.
 Mackenzie, A.F. 7250.
 Mackenzie, A.M.R. 5581.
 Mackenzie, C.R. 7192.
 Mackenzie, D.R. 1094, 8101.
 Mackett, M. 6596, 6638.
 Mackie, B.M. 6241.
 Mackin, K.L. 2312, 7807.
 Mackinnon, P.A. 7615.
 Mackin, I.W. 3027.
 Macleod, S. 7323.
 Macleod, S.M. 500.
 Macleod, J. 786, 3106.
 Mackintosh, S.S. 873, 5962.
 Macklough, J. 6969.
 Makin, T. 4011.
 Makins, J.F. 4063.
 Makkar, G.S. 3586.
 Makkuu, K.M. 4544.
 Maksimenco, A.V. 7689.
 Maksimov, V.I. 1883, 4349,
 6942, 7752.
 Maksimov, V.N. 3579.
 Maksimova, G.A. 3179.
 Makuev, A.M. 4417, 7813.
 Malabarba, A. 9190.
 Malachuk, N. 2091, 7262.
 Malachova, P.T. 415.
 Malamou-Ladas, H. 2412.
 Malamy, M.H. 7335.
 Malaney, G.W. 9257, 9258.
 Malashenko, Yu. R. 7304.
 Malatshenko, N.E. 1223, 8013.
 Malchuk, G.B. 5009.
 Malcolm, P. 3929.
 Malcolm, S. 3690.
 Maldonado, R.I. 681.
 Malek, T.L. 6621.
 Malewska, R. 147, 3595, 3621.
 Malewicz, B. 6475.
 Malin, S. 9078.
 Malgorzata Maluszynska, G. 5773.
 Malibari, A. 5573.
 Malige, B. 1720.
 Malik, C.P. 7955.
 Malik, K.A. 4214, 4215, 8545.
 Malik, N. 1924.
 Malik, N.C. 2154, 8648.
 Malik, R.K. 1057.
 Malina, H.Z. 6517, 6518.
 Malinakova, J. 7557.
 Malinovskaya, L.P. 923.
 Malinovskaya, V.V. 466.
 Malinskaya, S.I. 3563.
 Malinich, M. 4153.
 Malkova, D. 4164.
 Malievale, J. 7498.
 Mallikarjuniah, R.R. 6871.
 Mallin, E.T. 5017.
 Mallinson, H. 3294.
 Mallon, G.F. 5811, 7544.
 Malloy, P.J. 670.
 Malone, J.A. 5059.
 Maloney, S.W. 7466.
 Malouf, E.E. 5692.
 Maloy, O.C. 5409.
 Malys, E. 5633.
 Malyska, H. 3138.
 Mathey, B. 1748.
 Manabe, M. 8875.
 Mancal, P. 7568.
 Mancini, G. 348, 419.
 Mancino, L.J.C. 3903.
 Mandatkar, A. 8028.
 Mandal, B.K. 3963.
 Mandava, N.B. 1119.
 Mandel, D.K. 864.
 Mandel, L.J. 2304, 9075.
 Mandell, M. 5653.
 Mandell, G.L. 7449.
 Mandelstam, P.L. 5961.
 Mandienius, C.F. 994, 3635,
 4149, 6143.
 Mandeville, R. 6647.
 Manecke, G. 763.
 Maneva, L. 2219.
 Manfili, R. 2674.
 Manfredini, S. 9118.
 Mangels, J.I. 5076.
 Manhas, M.S. 7406.
 Manian, S. 7147.
 Manian, S.S. 7280.
 Maniar, A.C. 4478.
 Manjavalil, J. 7110.
 Manjavalil, P. 7110.
 Manjion, P.D. 8174.
 Manji, B.T. 1139.
 Manjion, J.L. 5611.
 Manjunath, A. 2945, 3932, 7276.
 Manka, M. 1079, 5373.
 Mannars, J.G. 1962.
 Mannars, J.M. 251.
 Manney, T.R. 3062.
 Manning, D.D. 2465.
 Manning, J.F., Jr. 4913.
 Manning, J.M. 7717.
 Mannweiler, K. 471.
 Manor, A. 9211.
 Manos, J.P. 494, 672.
 Manowitz, M. 1367.
 Manservigi, R. 918.
 Mansfield, J.M. 6180.
 Mansfield, J.W. 6304.
 Mansour, J.D. 555.
 Mansour, A. 8633.
 Mantley, A.E. 621.
 Mantle, P.G. 7043.
 Mantle, S. 1954.
 Manvell, P.M. 4193, 5056.
 Manviller, A. 8724.
 Manzara, S. 6501.
 Manzari, V. 5884.
 Manzer, F. 4559.
 Manzo, S.K. 8897.
 Maqbol Hossain, A.K. 9017.
 Mar, E.C. 4022.
 Mara, D.D. 582, 5054.
 Marais, G.V.R. 2345.
 Marakusha, B.I. 4080.
 Marasas, W.F.O. 122, 3735, 5256.
 Marasco, J. 5390.
 Marasuka, M.K. 8407.
 Marbhehant, P. 3177.
 Marca, P. 3473.
 Marci, I. 984.
 Marca, G. 6542.
 Marcandier, S. 6909.
 Marchal, C. 6644.
 Marchal, J.P. 8957.
 Marchal, M. 2650.
 Marchal, R. 7832.
 Marchand-Brynaert, J. 6537.
 Marchetti, M.A. 5425.
 Marchment, M.D. 8431.
 Marchoux, G. 3856.
 Marchioni Magno, S. 6483.
 Marchino, P. 2010.
 Marco, S. 4539.
 Marcon, M.J. 4189, 4788.
 Marcus, F. 5130.
 Marechal, J. 4169.
 Marfil, V.A. 763

Author Index

- Mathre, D.E. 4218, 5428.
Mathur, A.K. 1978.
Mathur, B.N. 6198.
Mathur, K.D. 1057.
Mathur, K.C. 2054.
Mathur, J.R. 8143.
Mathur, S.B. 8036.
Mathur, S.N. 7705.
Matoi, S.H. 2643.
Matseluykh, B.P. 7411.
Matsen, J.M. 788, 1667, 3339, 4032, 6787, 7617.
Matsubara, F. 9320.
Matsubara, H. 3166, 3172.
Matsubara, N. 2261.
Matsuda, I. 7112.
Matsuda, J. 4101.
Matsuda, K. 2815, 5993, 7818, 8574.
Matsuda, S. 9223.
Matsuda, Y. 3489.
Matsufune, Y. 6550.
Matsushashi, M. 7332.
Matsushashi, Y. 1314.
Matsushashi, Y. 5261.
Matsui, H. 5981, 5851.
Matsuki, H. 959.
Matsumoto, K. J. 7364.
Matsumoto, K. 1779, 9120.
Matsumoto, S. 455, 7774, 9217.
Matsumoto, T. 3069, 8735.
Matsumoto, Y. 2316.
Matsumura, E. 8596.
Matsumura, F. 2713.
Matsumura, M. 4142, 6042.
Matsumura, K. 1461, 7488.
Matsumura, T. 1468, 3559, 3582.
Matsumura, H. 2292.
Matsumura, R. 101, 169, 981.
Matsumo, S. 1560.
Matsumo, R. 7680.
Matsumoto, T. 511, 1438, 3115.
Matsumo, Y. 4263.
Matsuoka, H. 3577, 7852.
Matsusaki, S. 1058.
Matsushima, Y. 1787.
Matsushita, K. 4347, 8592.
Matsushita, Y. 517.
Matsuuchi, K. 884.
Matsuura, K. 8423.
Matsuura, S. 8875.
Matsuura, Y. 2625, 3251.
Matsuyama, T. 5025.
Matsuzaki, M. 3483.
Matsuzawa, H. 66.
Matsuzawa, M. 608.
Matti, G. 1893.
Mattern, I.E. 5914.
Matteucci, S. 197.
Matteucci, D. 4043.
Matteucci, H.W. 2235.
Matteucci, J. 2415.
Matteucci, J.S. 731, 770.
Matteucci, P.R. 6436.
Matteucci, P.S. 131.
Matteucci, R.E.F. 3963.
Matteucci, S.W. 1275.
Matteucci, T.M. 4219.
Matthieu, J.L. 6740.
Matthysse, A.G. 8854.
Matthysse, B. 140, 994, 3431, 3624, 3635, 3659, 3687, 4419, 5127, 6143, 6531, 7436.
Mattina, R. 6542.
Mattingly, J.A. 8478.
Mattingly, P.G. 6581.
Mattoo, A.K. 8576.
Mattoon, J.R. 6146.
Mattsy-Baltzer, I. 5064.
Matuhasi, T. 729.
Matumoto, M. 606, 5886.
Matuz, J. 8098.
Matvienko, N.N. 1741.
Matytsina, O.I. 1322.
Maude, R.B. 8055.
Mauersberger, S. 7307.
Maul, A. 1495.
Mavrituna, F. 1694.
Maviani, M.I. 191.
Mavrina, L. 5084, 5085.
Mawhinney, P.T. 6197.
Maxby, R.B. 4718, 7031.
Maximov, R.I. 6875.
Maximova, T.S. 3128.
Maxwell, D.P. 2056, 4507, 8887, 8898.
Maxwell, F. 6619.
Maxwell, I. 6619.
May, A. 4994.
May, J.T. 9284.
May, J.W. 7687, 9178.
May, S.W. 886.
Mayatt, J.H. 49.
Mayberry, W.R. 9308.
Mayer, M.R. 6045.
Mayfield, C.I. 5306.
Mayfield, M.B. 3662.
Mayhew, D.E. 8842.
Mayhew, J.W. 1309.
Maynard, J.E. 640.
Mayne, A. 2997.
Mayo, D.R. 607.
Mayo, K.H. 1.
Mayrova, V.N. 7332.
Mayr, A. 2361.
Mayrand, D. 855.
Maystrenko, O.I. 2865.
Mayzner, V.F. 4358.
Mayumi, M. 7481.
Maza, L.M. 1674.
Mazanov, A.L. 1741.
Mazars, C. 3801.
Mazen, M.B. 6335, 7196.
Mazens, M.F. 4006.
Mazet, M.-C. 6593.
Mazet, M. 553.
Mazza, L.A. 5058.
Mazza, M. 2224.
Mazzeo, P.G. 6318.
Mazzaracchio, R. 6734.
Mazzotti, M.F. 4940.
Mbafor, T.J. 1328.
Mbatia, P.B.A. 1067.
Mbonka-Uda, B. 2990.
Mbunga, S.K. 3692.
McAfee, W.J. 4077, 5018, 6603, 6651.
McAfee, W.J. 4074.
McAndrew, D.W. 8960.
McBeath, J.H. 5580.
McBrine, B.C. 3359.
McBrine, D.F. 2021.
McBrine, M.E. 8430.
McCahon, D. 6635.
McCaun, J.W. 7185.
McCandlish, I.A.P. 4201.
McCandlish, B.A. 119.
McCart, S.M. 276, 4561, 5457.
McCarthy, A. 2725, 7820.
McCarthy, A.D. 900.
McCarthy, A.J. 6943.
McCarthy, B.J. 1288.
McCarthy, C.M. 5119.
McCarthy, D.A. 2013.
McCarthy, D.H. 6662.
McCarthy, L.R. 1642.
McCarthy, D.E. 4916, 6680.
McCartney, H.A. 5403.
McCarthy, P.L. 3611, 8690.
McCaslin, B. 8221.
McChesney, J.D. 3548.
McClain, D. 1051.
McClary, D.G. 7437.
McClatchy, K.D. 1583, 4708.
McClatchy, K.J. 8292.
McClatchy, K. 1660.
McClautherty, C.A. 6322.
McClanahan, M. 2449.
McClure, J.K. 9251.
McColl, J.G. 8245.
McConnell, K.J. 9253.
McConnell, M.M. 1935.
McConnell, F.X. 3623.
McCord, J.D. 3705.
McCorkle, G.R. 8457.
McCormack, W.M. 790, 2492, 4183.
McCoy, C.W. 3565.
McCoy, R.E. 280.
McCoy, R.J. 1201, 6287.
McCoy, T.J. 5494.
McCracken, G.H. Jr. 4884.
McCracken, L.D. 3622, 3551.
McCreary, J.J. 4909.
McCreight, J.D. 5474.
McCrossin, I. 7530.
McCuen, R. 6149.
McCullen, K.G. 2228.
McCullough, J.E. 95.
McDaniel, L.E. 820.
McDaniels, E.A. 1459.
McDevitt, D.A. 7418.
McDonald, A. 2401.
McDonald, D. 5430, 7086.
McDonald, G.I. 8949.
McDonald, K.O. 2666.
McDonnell, C. 1585.
McDonnell, M.M. 5663.
McDonough, F.E. 7011.
McDonough, J.J. 6524.
McDougal, J.S. 653.
McDougal, L.K. 3012, 4712, 7447.
McDowell, D. 1504.
McElhaney, J. 2391.
McElhannon, W.S. 9002.
McElroy, W.D. 5864.
McEnroe, A.S. 9196.
McEdden, H.W. Jr. 1407.
McFadden, J.P. 3734.
McFarland, J.W. 3158.
McFeeters, R.F. 5316, 7003, 7871.
McFeters, G.A. 1601, 8415, 8417, 8421.
McGahren, W.J. 3153, 3154, 6553, 6889.
McGaughey, W.H. 4386.
McGeary, S.A. 1381, 3259.
McGee, P.A. 2132.
McGhee, J.E. 3497.
McGinnis, M.R. 1660.
McGinty, R.M. 8374.
McGirr, L.G. 1180.
McGlothin, M.S. 4753.
McGlothin, N.E. 4020.
McGovern, M.H. 2777.
McGowan, B. 3185.
McGowan, D.A. 2252.
McGowan, J.E., Jr. 3030.
McGrath, D.M. 1673.
McGrath, S.P. 8255.
McGraw, A.C. 825, 3358, 7298.
McGraw, T.P. 3303.
McGregor, A.J. 5526.
McGregor, D.N. 9187.
McGregor, W.C. 3425.
McGroarty, J.A. 447.
McGuire, M.J. 7501, 7646.
McGuire, N.M. 742.
McGuirk, J. 7573.
McGuirk, P.V. 4767.
McHardy, W.J. 8487.
McKenney, M.C. 5804.
McHugh, G.L. 5790.
McHugh, J.B. 5727.
McInerney, M.J. 5265.
McInnes, A.G. 8378.
McIntosh, A.H. 2657, 6900, 6903.
McIntosh, K. 623, 1561, 1564.
McIntosh, M.S. 3941, 8935.
McKay, L.L. 2196, 2739, 6990, 6991.
McKay, R. 589.
McKee, S.A. 2225.
McKee, W.E. 5522.
McKee, B. 5308.
McKellar, R.C. 7749, 7849.
McKenna, C.E. 2607.
McKenney, D.J. 4672.
McKenzie, R.I.H. 4577.
McKercher, R.B. 4626, 5682.
McKercher, C. 2231.
McKernan, P.A. 9116, 9118.
McKersie, B.D. 1068.
McKie, J.E. 788.
McKim, H.L. 1456.
McKim, T.W. 5845.
McKinley, P. 1319.
McKinley, G.A. 7625.
McKinley, V.L. 5819.
McKinney, R.M. 3293.
McKinney, R.W. 1522.
McLafferty, M.A. 2312.
McLain, C. 2231.
McLaughlin, J.C. 3313.
McLaughlin, M.R. 7927, 8445.
McLaughlin, R.E. 5264, 6083, 6902.
Melnik, S.Ya. 4031.
Melnikova, E.E. 2328.
Melnikova, V.A. 9272.
Melnikova, V.M. 3079.
Melo, C. 8580.
Meloni, G.A. 657.
Meloni, M. 990.
Melouk, H.A. 5491, 8061.
Melrose, J. 837.
Melton, B. 8221.
Melton, C.C. 6987.
Melton, L.D. 4368.
Melville-Smith, M.E. 4488.
Melville, S.C. 1985.
Menassa, A. 24.
Mendelsohn, P.M. 7338.
Mendelovitz, S. 2257.
Mendelson, J. 691.
Mendez, J.E. 2158.
Mendgen, K. 2791, 8102.
Menegus, M.A. 612, 4988.
Meng, C. 4322.
Meng, H.D. 8757.
Meng, Z.H. 8757.
Menge, J.A. 827, 1269, 2809, 5616, 5642, 8200.
Menke, G. 7761.
Menkyn, R. 57.
Menton, J.C. 8082.
Menz, K.M. 3888.
Menzie, D.E. 5265.
Menzies, J.D. 2446.
Mercer, E.H. 1131.
Mercer, P.C. 5587, 5589.
Mercer, S. 6833.
Merchant, R. 5181.
Merigan, C.T. 8327, 9115, 9121.
Merin, U. 192.
Merino, C. 433.
Merkal, R.S. 3324.
Merkel, K.E. 4870.
Merkur, J. 6256.
Merle, G. 8963.
Merli, A. 620.
Merone, G.C. 379.
Merrick, C. 36.
Merrick, R.L. 6161.
Merrifield, R.B. 4732.
Merritt, F. 5811.
Merritt, R.W. 7222.
Merry, J.M. 4756.
Mertens, J.L. 208.
Mertens, T. 5878.
Mertens, Th. 591.
Mervic, M. 7839.
Merz, W.G. 2280.
Merzbach, D. 489.
Mes-Hartree, M. 1892, 5274.
Messelton, M. 745.
Messler, M. 3075.
Meshram, S.U. 2088.
Messenger, A. 2849.
Messias, C.L. 4227.
Messing, F. 5304.
Messing, J. 626.
Messing, R.A. 19, 4124, 7511.
Metcalfe, R.J. 3285.
Metcalfe, T.G. 3226.
Metcalfe, W. 782.
Metcalfe, A. 2621.
Metcalfe, D.R. 5503.
Metche, M. 6791.
Metzner, H. 6136.
Metsaenheimo, K. 2102.
Mett, H. 9088.
Metwalli, S.M. 8606.
Metwalli, M.M. 7054.
Metzler, L.S. 3162.
Meulmans, M. 2899.
Meunier, J. 2871.
Meurman, O. 3238.
Meurman, O.H. 637.
Meurs, H. 2533.
Mew, I.-P.C. 6243.
Meyers, S. 6204, 6298.
Meyer, C. 8591.
Meyer, F. 6601.
Meyer, H.-D. 6121.
Meyer, J.C. 2500.
Meyer, J.L. 5907.
Meyer, J.M. 870.
Meyer, M.C. 2207.
Meyer, M.P. 5002.
Meyer, N. 8412.
Meyer, R.A. 5917.
Meyer, R.D. 1391.
Meyers, S. 2714.
Meyers, A.J., Jr. 7525.
Meyers, R.J. 6728.
Meyers, S.P. 2714, 5812.
Meyling, J.C. 5296.
Mezes, P.S. 1780.
Meyer, T. 1607.
Mheen, T.-I. 2248.
Michael Gaydos, J. 4692.
Michaels, A.S. 2.
Michaels, E. 3911.
Michalak, M. 4194, 7598.
Michaluk, V. 5716.
Michaluk, V. 5716.
Michaud, R. 8087.
Michaux, M. 4221.
Michal-Brand, Y. 7345.
Michel, G. 4886, 5129, 9141.
Michel, J.L. 5489.
Michel, M.L. 6594.
Michel, M.F. 4040, 6418.
Michelenia, V.V. 6012.
Michels, P. 8163.
Michels, M.J.M. 674.
Michon, F. 5200.
Michon, T. 4748.
Mickins, B. 6227.
Mickelson, M.N. 3058.
Micio, A. 105.
Middlebrooks, E.J. 2375.
Middleton, C.A. 4120.
Middleton, J. 8370.
Middleton, P.J. 8438.
Middleton, R.F. 9152.
Midorikawa, Y. 1799, 2574, 7.
Midtun, K. 6599.
Mieczkowski, M. 7508.
Miedaner, H. 2682, 2691, 691.
Mielke, M. 1236.
Miernik, J. 320.
Miers, L.A. 3244.
Miescier, J.J. 2342.
Miffin, B.J. 9007.
Miffich, J. 9321.
Mignatti, P. 9078.
Mihali, D. 2845, 8035.
Mikami, Y. 132, 3734, 6072.
Mikel, M.A. 4584, 8091.
Mikhail, I.A. 667.
Mikhailov, S.N. 5152.
Mikhailova, R.V. 4352, 6038.
Mikhaylova, G.V. 2557.
Mikhlin, D.E. 4642, 6486, 64.

Author Index

Mukata, S. 27, 28.
Mukata, S. 3291.
Mukherjee, A. 6049.
Mukherjee, A.K. 1825, 3529.
Mukherjee, B. 2133.
Mukherjee, P. 5740.
Mukherjee, N. 6254.
Mukhija, S. 5779.
Mukhin, V.A. 3920.
Mukhina, R.M. 2192.
Mukhopadhyay, A.K. 7273.
Mukhopadhyay, S. N. 2697, 3979, 9299, 9367, 9368.
Mukoyama, I. 1560.
Mulder, C. 4977.
Mulder, G. 6339.
Mulder, S.L.T. 481.
Muldren, E.F. 7205.
Muller, H. 1372.
Mulla, M.S. 1845, 6914.
Mullaly, R.D. 2453.
Mullally, P. 1935.
Mullen, W.M.A. 5905.
Mullenax, J.G. 9115.
Muller, A. 3346.
Muller, L. 4004.
Muller, R.A. 6289.
Mullick, S.G. 3257.
Mullier, G. 6841.
Mullin, B.C. 4370.
Mullins, B.J. 8879.
Munbran, E.N. 6280.
Mumm, R.F. 4501.
Muntz, G. 8368.
Munack, A. 5963.
Munich, K. 958, 959, 1446.
Munro, B.P. 1936.
Munga, F.M. 5569.
Munglikar, A.M. 1070.
Munguia, G. 7582.
Muniyappa, V. 6235.
Muniz, R.L. 1963, 8052.
Munk, 2882.
Munnecke, D.M. 8398, 8684.
Munno, I. 5385.
Munns, D.N. 8993.
Munoz Cebrían, J.M. 1304.
Munoz, A. 1350, 2233, 4183.
Munro, D. 4205.
Munro, J.A. 2922.
Munro, P.A. 6022.
Munsey, D.T. 6979.
Munshi, G.D. 8774.
Munshi, M. 6749.
Munshi, R.S. Jr. 3412.
Muntanola-Cvetkovic, M. 7048.
Munteanu, V. 2489.
Murachi, T. 88.
Murad, F. 3354.
Murad, V. 8619.
Murahashi, T. 3577.
Murai, A. 3134.
Murakami, K. 62, 1745, 8604.
Murakami, M. 1767.
Murakami, T. 1314, 6406.
Murad, M. Y. 8519.
Muralidhara Rao, B. 7964.
Muramatsu, M. 4695.
Muranshi, S. 455.
Muraos, S. 94, 1724, 1763, 8578, 8596, 8663.
Muraos, A. 6550.
Murat, K. 6849.
Murata, N. 2670.
Murata, S. 935.
Muratore, O. 9126.
Murayama, S. 7286.
Murayama, S. 3084.
Murdin, A.D. 656.
Murdoch, J.A. 5356.
Murgui, L. 6503.
Muro, T. 7688, 7691.
Murphy, B. 3258.
Murphy, B.J. 4887, 6596, 6602.
Murphy, E. 9075.
Murphy, E.C. Jr. 6648.
Murphy, F.A. 6744.
Murphy, J.A. 6519, 6528.
Murphy, J.F. 8777.
Murphy, M.D. 4168.
Murphy, V.G. 3726, 5310.
Murray, B.E. 4697, 7326.
Murray, B.K. 9116.
Murray, E.B. 4748.
Murray, E.G. 6437.
Murray, H.G.S. 6745.
Murray, J.J. 7555.
Murray, K.E. 3735.
Murray, M. 6893.
Murray, P.R. 512, 1334, 1651, 2244, 3014, 3077, 3260, 4821, 4861.
Murray, S.I. 3086.
Murray, S.K. 7849.
Murray, W.D. 152, 5270.
Murrell, S.A. 2611, 8860.
Murthy, H.M.K. 2587.
Murthy, K.V. 6460.
Murthy, P. 8769.
Musa, G.L.C. 8907.
Muscat Baron, J.M. 8299.
Musikova, M. 1708, 6814.
Musso, E. 6508, 6509, 6526.
Mustardy, L.A. 2775.
Muthala, L.N. 4133.
Muthalan, A. 4132.
Mutharasan, R. 156, 4229.
Muthard, D.A. 6536.
Muthukumar, N. 7693.
Muttimer, M.D. 3282.
Mutiu, A. 482, 463.
Mutiu, Y. 5786, 5788, 5789.
Myers, H.L. 3119.
Muzalewski, F. 3120.
Myar, M. 6666.
Myzargikh, I.V. 882, 4289, 4302.
Myasnikov, L.G. 7672.
Myaskovskii, R. 8678, 8406.
Mycroft, H. 327.
Myers, B. 4564.
Myers, D.E. 889.
Myers, G.E. 9490.
Myers, W.F. 6045.
Myerson, A.S. 3974, 7808.
Myhre, D. 4635.
Myrkorak, C.K. 644.
Myron, J.J.C. 4568.
Myrup, A.C. 3246.
Myskow, W. 1894, 2786.
Mytton, L.R. 409, 5678.
Nabbut, N.H. 1326, 7415.
Nabe, K. 37, 1775.
Nahamkin, I. 3274.
Nahmias, A. 7133.
Nachtmann, F. 1395.
Nademy, B. 4441.
Nadkarni, B.G. 8542.
Nadkarni, S.R. 1390.
Nadler, K. 4644, 9005.
Nadhem, S. 7736.
Nafade, S.D. 6315.
Nag, N.C. 3031.
Nag, T.N. 8336, 8339.
Nagahama, G. 992.
Nagai, S. 5757.
Nagach, B.B. 3827, 8023.
Nagamine, T. 606.
Nagamune, T. 3630.
Naganawa, H. 5957, 6804, 7459.
Nagano, H. 7115.
Nagao, A. 8591.
Nagao, T. 573, 777.
Nagaoka, K. 1314.
Nagaraja, K.V. 6983.
Nagarajan, S. 6246, 7961.
Nagasawa, T. 4329, 4822.
Nagase, T. 206.
Nagashima, M. 3639, 6130, 8659.
Nagata, A. 6160.
Nagata, W. 6521.
Nagayama, T. 7108.
Nagel, A.A. 3123.
Nagel, M. 3218.
Nagieva, F.G. 7562.
Nagle, M.E. 8926.
Nagornaya, A.F. 7398.
Nagra, P. 1975.
Naguib, A.I. 3533.
Naguib, K. 7058, 7085, 7647.
Naguib, M. 422.
Naguib, M.I. 1341, 8316.
Naguib, M.M. 7058, 7085, 7647.
Nagy, D. 6498.
Nagy, E. 7016, 7696, 9249.
Nahler, G. 7477.
Nahmias, A. 631, 652, 653.
Nahmias, D.G.E. 653.
Nai, P. 9311.
Naidler, F. 458, 8311.
Naiki, T. 1091, 1126.
Nair, G. 5043.
Nair, K.K.S. 6199.
Nair, K.M. 8447.
Nair, M.S.R. 527.
Nair, S.P. 3183.
Natto, A. 2310, 3567, 3585.
Natto, K. 6559.
Natto, N. 3308.
Nattupour, G. 3417.
Naka, S.O. 5057.
Nakae, T. 3701.
Nakagawa, A. 1437, 3166, 3167, 3168, 6869.
Nakagawa, F. 3567, 3585.
Nakagawa, K. 519.
Nakagawa, M. 960, 5802, 7475.
Nakagawa, Y. 2218, 7527.
Nakahara, T. 2560, 5961.
Nakajima, K. 4685.
Nakajima, M. 2302.
Nakajima, S. 8375, 8681.
Naele, H.W. 6537.
Nazzari, K.H. 8208, 8209.
Neave, F.K. 571.
Nebreda, A.R. 6036.
Nechaev, A.P. 3583.
Nechaev, Yu.S. 6003.
Nedjati-Niazi, H. 5042.
Nedresova, T.P. 4731.
Nedwell, D.B. 6066.
Needham, J.R. 5766.
Neelakantan, S. 7051, 7087, 7090, 7339, 7549.
Neely, D. 3855, 5606.
Neely, W.C. 3459.
Neeman, I. 6750.
Neergaard, P. 8036.
Neidleman, S.L. 904, 5187, 7653.
Neigenfind, M. 3147.
Neikter, K. 4139.
Neil, G.L. 7380.
Neimister, R. 722.
Nemes, R.E. 6422.
Nemnick, L. 3595, 3621.
Neis, J.M. 3553.
Neklyudov, A.D. 7739.
Nekvasilova, H. 8254.
Nekayama, K. 8627, 9125.
Nelligan, I. 2269.
Nelson, B.D. Jr. 4517.
Nelson, D. 5961.
Nelson, D.W. 896.
Nelson, E.B. 224, 2573.
Nelson, G.A. 7998.
Nelson, J. 1206.
Nelson, K.E. 3221, 8057.
Nelson, L.M. 5654.
Nelson, M.G. 5489.
Nelson, M.L. 2747.
Nelson, M.F. 8811.
Nelson, P.E. 6185.
Nelson, P.R. 1443.
Nelson, R.R. 5502, 7

- Paine, T.D. 8193, 8194.
Painter, J.C. 4113.
Painter, P. 2671.
Pais, S. 380.
Pal, J.N. 1827, 4363.
Pal, S. 5043.
Pal, S.C. 5043, 5380, 8609.
Palacios, P. 4012.
Palagina, N.K. 5089, 8485.
Palekova, F. 6828.
Palei, O.S. 3084.
Palen, E. 784, 5710.
Pallanza, R. 6571, 8384.
Pallavicini, C. 6876.
Palleros, N.J. 1432.
Pallieschi, G. 7748.
Pallioia, E. 4128.
Palma, E.L. 4987.
Palmer, J.G. 829.
Palmer, J.K. 6156.
Palmer, K.T. 4554.
Palmer, M.L. 4961, 6711.
Palmer, M.D. 1502.
Palmgren, M.S. 8913, 7109.
Palomino, C. 863.
Pais-van Dam, J.W. 7118.
Paiu, G. 9112, 9126.
Paiubinskis, V.I. 7689.
Palumbo, M. 6483.
Palva, A. 8313.
Palva, A.M. 1616.
Palz, W. 7639.
Pamment, N.B. 989, 3581, 4413.
Pan, C.T. 5291.
Pan, I.C. 634.
Pan, Y.H. 6738.
Panagopoulos, C.G. 335.
Panangala, V.S. 3343.
Panchal, C.J. 3628, 4407, 5803, 6110.
Panchenko, L.P. 5336.
Panchenko, N.B. 3084.
Panchishkina, M.R. 9012.
Pancorbo, O.C. 5828.
Panda, T. 1736, 8514.
Pande, V.C. 4016.
Pander, A.K. 8333.
Pandey, K.D. 5305, 9106.
Pandey, S.L. 4620.
Pandarunge Gowda, K.T. 4586.
Panfil, G. 1075, 1077.
Pang, T. 2479.
Panholzer, B.R. 4715.
Pani, A. 8328.
Panicali, D. 6633.
Panicali, D.L. 8385.
Pankhurst, C.E. 2966.
Pankow, W. 8705.
Pannier, M. 2354.
Pannier, W.L. 4020.
Panopoulos, N.J. 8765.
Panos, J. 6056.
Panse, M.V. 4002, 4003.
Pant, M. 6469.
Pant, K. 126, 6911.
Pantukhava, S.S. 7304.
Pantiwatana, S. 2658.
Panzarella, L. 6692.
Paolotti, E. 6633.
Paoni, N.F. 1755.
Papadopoulos, Y.A. 1068.
Papaeangelou, G. 6799.
Papageorgakopoulou, H. 4172.
Papageorgopoulou, M. 3108, 7621.
Papasian, C.J. 4180.
Papavasiliou, J. 3108, 4136.
Papavizas, G.C. 338, 1210, 5508, 8918, 8924.
Papierko, B. 5231.
Papka, K. 5610.
Papker, A. 5408.
Papkov, G.L. 4902.
Papoutsakis, E.T. 3549.
Papoutsakis, E.T. 3549.
Pappa, A. 7621.
Pappagianis, D. 815.
Peaquet, M. 4221.
Parada, G. 799.
Parada, J.L. 5337, 6960, 8698.
Paramananthan, S. 7260.
Paranchyan, W. 6657.
Parashar, R.D. 7923.
Parearean, A. 4520, 8100.
Parent, J.-G. 7916, 8857.
Parent, F. 6568.
Pares, R.D. 286, 651.
Parfitt, D. 975.
Parham, C.E. 2511.
Paris, D.F. 1882.
Parsini, P. 7878.
Park, C.H. 3297, 7583.
Park, D.L. 7045, 7097, 7647.
Park, H. 3344.
Park, J.M. 5083.
Park, K.Y. 3703.
Park, N.H. 7388.
Park, Y.H. 5168, 6026.
Parke, J.C., Jr. 2515.
Parke, J.L. 2913, 5546, 5549.
Parker, A. 7135.
Parker, B.C. 3043.
Parker, C.A. 3360, 8986.
Parker, C.D. 2350.
Parker, J.G. 2350.
Parker, J.H. 5817.
Parker, J.M.R. 6625, 6657.
Parkin, L.W. 4439, 6392.
Parkin, G.F. 1483, 2376.
Parkin, T.B. 5670.
Parkinson, A.J. 602.
Parkinson, D. 5082, 5613, 7227, 7228, 8230.
Parkis, R.M. 2492.
Parleviet, J.E. 301, 2860, 2875.
Parmeter, J.R., Jr. 8319.
Parr, J.F. 5835.
Parr, S.R. 877.
Parr, T.R., Jr. 8407.
Parri, D. 585.
Parri, A.E. 1875.
Parrett, N.A. 4465.
Parres, D.S. 5006.
Parry, D.W. 1971.
Parry, J.B. 1807.
Parry, V.J. 4156.
Parry, M.F. 566.
Parshina, S.N. 1043.
Parsons, W.H. 2306.
Part, D. 7723.
Partos, J. 1045.
Partidge, A.D. 8182.
Partidge, J.E. 246.
Partidge, K. 8414.
Parvin, S. 262.
Parygin, E.V. 1403, 4879, 5974.
Pasalu, I.U. 1283.
Paschal, J.W. 442.
Pascholi, S.F. 1169.
Pascoe, I.G. 801.
Pascoe, Y.I.G. 7126.
Pasconova, E.A. 1536.
Pasculle, A.W. 7418.
Paschishchenko, V.A. 7355.
Pasiecznik, K. 1391.
Paskonova, E.A. 6733.
Passalacqua-Kohler, P. 2015.
Passarini, N. 4986.
Passarella, E. 6507.
Passer, A.J. 5445.
Passi, S. 1077.
Passino, R. 1484.
Passman, F.J. 3213.
Pasticli, M.B. 6412.
Pastori, F. 6409.
Pastore, C. 7585.
Pastoret, P.-P. 6471, 6476.
Pasynkova, L.N. 9070.
Paszczyński, A. 1771.
Pataky, J.K. 242, 1171, 8772.
Patel, A.J. 2306.
Patel, S. 2168, 6911.
Patel, H.S. 3063.
Patel, I.R. 4856.
Patel, J.J. 5662.
Patel, K.A. 4790.
Patel, K.D. 2044.
Patel, M. 2294, 6561.
Patel, M.V. 1390.
Patel, P.C. 4022.
Patel, P.N. 6231.
Patel, R.N. 5706.
Patel, T.R. 3285.
Paterson, A. 2725, 6943, 7820.
Paterson, G.M. 4449.
Pathak, B. 5740.
Pathak, K.N. 8803.
Pathak, N.K. 8049.
Pathak, N.N. 7019.
Pathania, R.A. 1034, 2719.
Pati, D.P. 395.
Pati, D.S. 3407.
Pati, S.S. 253.
Patino, H. 6984.
Patmore, M. 6502.
Patnaik, N.K. 8709.
Paton, A. 6345.
Patriarche, G.J. 6777.
Patrick, B.A. 638.
Patrick, W.H., Jr. 1274.
Patriquin, D.G. 6353.
Patterson, L.S. 666.
Patterson, D.S.P. 7047, 7079.
Patterson, F.L. 4578.
Patterson, G.R. 5323.
Patterson, H.D. 8943.
Patterson, J.W. 4125.
Patterson, M. 2003.
Patterson, R. 747.
Patterson, T.G. 2162, 2164.
Patton, R.F. 5602.
Pattyn, S.R. 4745.
Paul Khurana, S.M. 3827.
Paul, A.K. 875, 4881.
Paul, E.A. 2988, 5837, 8224.
Paul, H.L. 2437, 4538, 8440.
Paul, N.B. 7792.
Paulgupta, R.K. 7093.
Paulin, L. 7353.
Paulukonis, A.B. 5194.
Paulsen, H. 1834.
Paulukonis, A.B. 4335.
Paulus, L. 1206.
Paulus, W. 1353.
Pauluzzi, S. 6412.
Pautlyukonis, A.B. 7743.
Pause, S.M. 4104, 4904.
Pausan, K. 5665.
Pauze, F. 2778.
Pavar-Langston, D.R. 7328.
Pavanasavarn, G. 1929.
Pavanetto, F. 2224.
Pavetich, K.J. 683.
Pavillard, E.R. 7371.
Pavlasova, E. 3504.
Pavlati, A.E. 1875.
Pavlova, I.B. 4007.
Pavlova, I.N. 914.
Pavlovich, N.V. 1814.
Pavlovskis, O.R. 540.
Pavone, A. 3032.
Pavone, V. 3140.
Pavuk, R.A. 9185.
Pawar, M.N. 8137.
Pawson, R. 4197.
Payment, P. 645, 4955, 4990, 6650.
Payne, C.C. 4388.
Payne, G.A. 215, 6204, 6245.
Payne, J. 1845.
Payne, J.M. 6917.
Payne, E.V. 1403, 4879, 5974.
Payne, S.M. 2210.
Payne, S.M. 887.
Payne, S.N. 6773.
Payne, W.J. 880, 7614, 7710, 7713.
Payton, M.A. 2628, 7794.
Paziarova, J. 6035.
Pezzaglia, G. 5775.
Peak, M.C. 7159.
Peak, M.J. 6773.
Pearce, C.J. 1420, 4051.
Pearce, G.N. 3089.
Pearce, L.E. 4456, 7864.
Pearce, M. 7262.
Pearce, R.B. 7235, 7631.
Pearce, W.L. 539.
Pearson, A.M. 5302.
Pearson, A.W. 3310.
Pearson, G.D.N. 2327.
Pearson, G.R. 8437.
Pearson, J.M.H. 3023.
Pearson, M.N. 3870, 6286.
Pearson, N.J. 3258.
Pearson, R.C. 8833.
Peberty, J.F. 1222, 4047.
Pechere, J.-C. 3031.
Pechinot, A. 5769.
Pech, H.D., Jr. 7170.
Peschke, G.A. 2171.
Pesk, J. 641.
Pessoa Franca, F. 6813.
Pestana de Castro, A.F. 4485.
Pesti, M. 4757.
Pestika, J.J. 5365.
Pestis, S. 4778.
Petek, F. 5984, 5988.
Petelina, G.G. 8889.
Peter, G. 6435.
Peter, K.V. 8094.
Petry, F. 4881, 4892.
Peterson, P.I. 3690, 6968.
Petkovska, L. 6829.
Peterson, C.S. 765.
Peterson, H.D. 5425.
Peterson, J. 543.
Peterson, K.F. 3072, 6443.
Peterson, L.J. 4565.
Peterson, N.J. 472, 7539.
Peterson, M.M. 2128.
Peterson, D. 6412, 8414.
Peterson, E. 601.
Peterson, E.M. 690, 1663, 1670.
Peterson, G.W. 2802, 8941.
Peterson, J.B. 2975.
Peterson, J.F. 7141.
Peterson, J.R. 708, 1618, 3228, 5785, 7412, 7425, 7609.
Peterson, M.E. 615, 6713.
Peterson, N.V. 2143.
Peterson, P.J. 7261.
Peterson, A.-C. 4828.
Petit, A. 235, 4534, 8855.
Petit, M.-A. 4070.
Petitdemange, E. 3545, 4383, 5111.
Petitdemange, H. 142, 3545, 4383, 5111, 5237.
Petrankova, M. 2503.
Petranyi, G. 8320.
Petry, I. 956.
Petruciani, J.C. 3732.
Petroci, A.N. 1513.
Petrova, I.G. 8332.
Petrova, K.M. 6451.
Petrova, L.I. 6823.
Petrovskaya, V.G. 3995.
Petr, E. 3847.
Petrykina, Z.A. 7467.
Pettars, H. 7780.
Petterson, B. 931.
Petterson, C.A. 3236.
Petterson, L.G. 3509, 3510, 61.
Petterson, U. 808, 4979.
Petty, T.M. 2702.
Pettit, D.E. 2453, 5111.
Pettit, G.R. 1443.
Pettit, R.E. 1919.
Petts, D.N. 2490, 5048.
Pettersson, S. 6533.
Petushkova, Y.A. 8693.
Petzold, H. 2816.
Petzoldt, C.H. 1152.
Peyoux, F. 4886.
Peyton, T.O. 6704.
Pezzo, M.T. 690, 1670.
Pfeiffer, P.L. 7982.
Pfeiffer, M.A. 1651, 3260, 4821, 4861.
Pflaneneberg, T. 7606, 8260.
Pflanzenstiel, M.A. 1859.
Platz, A. 6071.
Pfleger, P.A. 7815.
Pfleger, C.M. 5622.
Pfleiffer, H. 4299.
Pflennig, N. 9315.
Pflister, H. 1947.
Pflister, M. 5007.
Pfleger, F.L. 2852.
Pflieger, L.H. 6985.
Phadtare, S.G. 1214.
Phair, J.P. 6773, 7590.
Phan, A.P.H. 93.
Phatak, S.C. 1848, 8090, 8871.
Phelps-Sandall, B.A. 6726.
Phelos, C.F. 3387.
Phelps, D.A. 649.
Phelps, K. 1157.
Phelps, P. 4402.
Phillip, A. 2528.
Phillip, H. 5826.
Phillip, K. 6374.
Phillip, W. 2365.
Phillip, L.E. 2744.
Phillips, A.P. 677, 8480.
Phillips, C.R. 5190.
Phillips, D.A. 4649.
Phillips, C. 1106, 2857.
Phillips, D.J. 610, 5885, 7992.
Phillips, D.V. 1172, 8118.
Phillips, E.A. 5906.
Phillips, E.K. 6544.
Phillips, G.B. 1623.
Phillips, G. 1623.
Phillips, J.A. 6373.
Phillips, J.A. 6194.
Phillips, J.M., Jr. 8366.
Phillips, J.N. 5531.
Phillips, K.R. 1836, 2629, 8621.
Phillips, L. 6510.
Phillips, L.R. 1833.
Phillips, L. 5751.
Phillipott-Howard, J. 2250, 6408.
Phillipotts, H. 6352.
Phips, P.H. 2448.
Phips, P.M. 1229.
Phips, E.J. 3582.
Pianotti, R. 8432.
Piatkiewicz, A. 1906.
Picard, B. 6856, 8557.
Picininno, G. 4128.
Pico, M. 567.
Piche, J. 592.
Pichon, F. 4619.
Pickan, D.J. 5700, 5940.
Pickett, A.W. 3359.
Pickett, A.J. 5401.
Pickett, M.J. 1619.
Pierman, A.K. 5742, 6446, 8317.
Pierke, J. 874.
Piel, N. 930.
Piel, J. 5863.
Piemont, Y. 6214.
Piero, A.M. 7718.
Piero, G.E. 4089, 5301, 5313.
Piero, H.D., Jr. 7718.
Piero, M. 2166.
Pierik, L.T. 1564.
Pierston, M.D. 6156, 7028.
Piersters, A.R. 3864.
Piersters, J.H.J. 7512.
Pierster, D.E. 8763.
Plexoto, D.R. 8715.
Pifer, L.L. 1584.

- Randhawa, P.S. 4199, 8929.
 Randisi, E. 6571.
 Randi, V. 484.
 Rando, J.G. 4151, 4152, 5405.
 Rangel, J. 1494.
 Raney, R.J. 7947.
 Rangarajan, M. 6378.
 Rangeley, A. 5628.
 Rangnekar, V.M. 1313.
 Ranjan, S.K. 7018.
 Rankin, M. 8313.
 Ransie, U. 4139.
 Ranta, J. 6129.
 Rao, A.L.N. 8850.
 Rao, A.S. 1830.
 Rao, A.V. 2963, 4175, 4623, 4670.
 Rao, C.H.P. 8305.
 Rao, C.V.N. 1827, 4363.
 Rao, D.L.N. 1637.
 Rao, D.R. 7865.
 Rao, D.V. 4523.
 Rao, G.R. 4853.
 Rao, G.O. 2211, 4009.
 Rao, J.L.N. 1283, 2964, 7281.
 Rao, J.R.K. 4514.
 Rao, K.K. 4856.
 Rao, K.P. 3468.
 Rao, M. 102, 3254, 3451, 3484, 5134, 6013, 7750.
 Rao, M.N.A. 13.
 Rao, N.A. 8597.
 Rao, N.G.P. 8890.
 Rao, R.N. 427.
 Rao, R.R. 4709.
 Rao, S.M. 7288.
 Rao, V. 3254.
 Rao, V.C. 2393.
 Rao, V.P. 1990, 3829.
 Rao, V.R. 377, 8769.
 Rao, Y.S.G. 2145.
 Raper, R.H. 4768.
 Raphael, R.A. 2232, 7538.
 Raphaelian, L.A. 3194.
 Rapmund, W. 2426.
 Rapoport, A.I. 1047.
 Rapoport, R.S. 5411.
 Rappuoli, R. 7058, 7912.
 Raschle, P. 1027, 1247, 2721.
 Rascio, A. 6409.
 Rasheed, J.K. 1084.
 Rashid, K.Y. 1984.
 Rasmussen, A.M. 7800.
 Rasmussen, K.E. 3751.
 Rasmussen, L. 9115.
 Rasmussen, L.E. 9121.
 Rasmussen, P.R. 5801.
 Rasmussen, S.P. 4396.
 Raspopina, G.I. 1599.
 Rassel, A. 3823.
 Rastogi, K.B. 5477.
 Rastogi, P. 5535.
 Raststrup Andersen, N. 5801.
 Ratcliffe, H.D. 8515.
 Ratcliffe, R.W. 6536, 6576.
 Rathmann, R. 4065.
 Rathor, M.N. 8534.
 Rathore, Y.S. 6087.
 Ratnam, S. 1591, 1594, 3285.
 Ratnamaharini, R. 872, 6955.
 Ratti, G. 7912.
 Rattray, J.B.M. 861.
 Raudaskoski, M. 5154.
 Raus, J. 3284.
 Rausch, T. 8874.
 Raut, J.G. 7966, 8026.
 Ravai, G. 142.
 Ravenscroft, A.V. 5419.
 Ravindran, A.D. 8378.
 Ravishanker, P. 7306.
 Rawal, R.D. 8779.
 Rawat, R.S. 4447.
 Rawlings, G.O. 5527, 6204.
 Rawlinson, C.J. 8374.
 Rawls, W.E. 2429.
 Rawsthorne, S. 6376.
 Ray, B. 8704.
 Ray, C. 2905.
 Ray, C.G. 613.
 Ray, P.K. 4005.
 Ray, R.M. 8530.
 Ray, S.B. 4620.
 Raybould, T.J.G. 4167.
 Raychaudhuri, S.P. 1991, 5492.
 Raychaudhuri, M. 6277.
 Raymahasay, S. 3230, 8509, 9332.
 Rayman, K. 1924.
 Rayman, M.K. 3690.
 Raymond, P.J. 7974.
 Rayner, A.D.M. 401, 7218, 7630, 8190.
 Razin, A. 830.
 Razin, S. 3377.
 Razniewska, T. 5931.
 Razzano, G. 6142.
 Re, M.C. 1551.
 Read, D.C. 2173.
 Read, D.J. 5573, 5945.
 Read, P.J. 4581.
 Read, R.J. 20.
 Reaney, D.C. 5717.
 Reardon, R.C. 139, 3556, 6078.
 Rebeller, M. 7832.
 Rebuffat, S. 1414, 1727.
 Redaelli, G. 9189, 9260.
 Redding, J.S. 3081.
 Reddy, B.B. 2964, 7281.
 Reddy, B.N. 7894.
 Reddy, D. 6203.
 Reddy, D.V.D. 4504.
 Reddy, D.V.R. 6235, 8769.
 Reddy, G.C.S. 1390.
 Reddy, G.S. 7865.
 Reddy, J.S. 7791.
 Reddy, K.J. 3582.
 Reddy, M.K. 7160.
 Reddy, M.N. 8771.
 Reddy, M.V. 3787, 3863, 3883, 7139, 8093.
 Reddy, N.R. 6156.
 Reddy, N.S. 3701.
 Reddy, P.A. 8772, 5747.
 Reddy, P.B. 4313.
 Reddy, M. 9137.
 Reddy, S. 248.
 Reddy, S.M. 3797, 8313, 8340.
 Reddy, Y.S. 8305.
 Reddy, Y.D. 8340.
 Reden, J. 1390.
 Redhammer, S. 7761.
 Redlin, M.J. 3945.
 Redmond, S.R. 4949.
 Redrup, M.J. 4831.
 Reed, G. 5941.
 Reed, M.D. 5725.
 Reed, S. 4763.
 Rees, J.F. 1457.
 Rees, R.C. 9169.
 Rees, R.W. 1426.
 Reese, E.T. 4326.
 Reeves, J.N. 3997.
 Reeves, D.S. 330, 6467, 9173.
 Refling, D.R. 3190.
 Regan, T.J. 3089.
 Regel, E. 8314.
 Regensburger, B. 2962.
 Regli, P. 5739.
 Regnier, R.L. 1548.
 Regnier, J. 3555.
 Regoeci, E. 2573.
 Rehm, H.J. 969.
 Reich, P.H. 6385.
 Reichert, J.R. 40, 44, 45, 48, 51, 52, 198, 839.
 Reichenbach, H. 2291, 3130, 4885, 9209.
 Reicheneder, E. 3587, 6131.
 Reichman, M. 4499.
 Reichman, U. 6482.
 Reiche, C.P. 380, 1259, 5538, 5547, 5572, 5576, 8215.
 Reid, D.G. 4066, 7463.
 Reid, J.B. 1265.
 Reid, P. 675.
 Reid, T.M.S. 4449.
 Reifenscheid, G. 2291.
 Reig, J.A. 7753.
 Reig, R. 8290.
 Reihel, D.A. 4140.
 Reijnen, J.W.M. 3553.
 Reilly, C.C. 8913.
 Reilly, G.D. 6555.
 Reilly, K.M. 5783.
 Reimann, R. 6896.
 Reimer, C.B. 610, 5885.
 Rein, A. 8380.
 Reina-Guerra, M. 5811.
 Reid, W. 2718, 3449, 7826.
 Reiners, W.A. 2908, 2909.
 Reinert, R.A. 8992.
 Reinhardt, G. 116.
 Reinhardt, C. 3924.
 Reinhold, M. 3690.
 Reinko, C.M. 5478.
 Reis, E.R. 5420.
 Reiser, R.F. 8751.
 Reising, G. 687.
 Reiss, J. 9271.
 Reissbrodt, R. 7629.
 Reiter, S.E. 5115.
 Reizer, J. 8555.
 Rekosz, H. 6678.
 Rekrut, K.A. 4982.
 Rele, M.V. 7742.
 Reiler, B. 2466.
 Reilly, L.B. 702, 703, 1608, 1650, 2514, 2522, 3309, 9167.
 Reiton, J.M. 1166.
 Remaudiere, G. 5231.
 Rembaum, A. 6037.
 Remezov, A.P. 9101.
 Renard, J.M. 8633.
 Renard, J.L. 2871.
 Renard, M.F. 1881.
 Renato de Freitas, J. 5652.
 Reneaume, M. 4081.
 Renner, M. 1908.
 Renganathan, V. 6957.
 Renkanen, A. 82, 83, 4314.
 Rennie, D.A. 2988, 5669.
 Rennie, R.J. 8247, 8249, 8250, 8398, 9021.
 Rennie, R.P. 5041.
 Rapanovici, R. 463.
 Repetto, C.M. 620.
 Reshetova, T.A. 7888.
 Riddleberger, K.R. 1565.
 Resnick, A. 5930.
 Restaino, L. 4568.
 Restrepo, A. 2535.
 Resz, A. 3886.
 Rethly, L. 4891, 4892.
 Rethly, L.A., Jr. 4891, 4892.
 Retnakaran, A. 3570.
 Retsema, J.A. 3121, 3123, 3158.
 Retuerta, M.L. 6276.
 Reunov, A.V. 288.
 Reunov, M. 6118.
 Reusser, F. 2287, 4877.
 Reuter, B.W. 6819.
 Reuveni, M. 341.
 Reuveni, R. 9105.
 Reva, A.G. 6933.
 Revankar, G.R. 9119.
 Rewel, M. 3424.
 Reverdy, M.E. 4789.
 Revina, L.P. 5153.
 Revsbech, N.P. 5670.
 Revus, D.E. 5265.
 Rexova-Benkova, L. 15, 926, 3480.
 Reyschlegel, J. 1236.
 Rey, A. 1544.
 Rey, M.A. 5983.
 Reyes, L. 4818.
 Reyes, M.P. 7417.
 Reyes, S. 1595.
 Reynolds, N. 631.
 Reynolds, D.J. 8434.
 Reynolds, H.S. 1617.
 Reynolds, J.A. 770.
 Reynolds, K.L. 7139.
 Reynolds, P.E. 9048.
 Reynolds, S.M. 1370.
 Rezapkin, G.V. 7570, 8455.
 Rezk, M.A. 283.
 Reznickoff, W.S. 1315.
 Rhee, H.K. 5168, 6026.
 Rhee, J.A. 970.
 Rhee, J.S. 1853.
 Rhee, S.K. 8663.
 Rheinhart, M.S. 5088.
 Rhinehart, W.L. 185, 7836.
 Rho, D. 7728.
 Rhoades, R.K. 723.
 Rhoades, D.L. 886.
 Rhoades, A.M. 4584, 8091.
 Rhodes, L.H. 833, 2120.
 Rhodes, P.M. 4056.
 Riba, G. 6909.
 Ribbons, D.W. 998, 3486, 7828.
 Ribeiro, C.D. 6754.
 Ribereau-Gayon, P. 1870, 3625, 4410, 5286, 6134, 6936.
 Riboldi, F. 9189.
 Riboulet, J.M. 1870.
 Riccardi, C. 9136.
 Ricchelli, F. 899.
 Ricci, A. 9136.
 Ricci, L.C. 4485.
 Ricci, N. 9160.
 Ricciardi, I.V. 1945.
 Rice, A.D. 5401.
 Rice, D.W. 8004.
 Rich, A.E. 3380.
 Rich, D. 2305.
 Richard-Molard, D. 2051.
 Richard, C. 1636, 4423, 8087.
 Richard, G. 6909.
 Richard, J. 6993.
 Richard, J.L. 8755.
 Richard, M.G. 668.
 Richard, N. 2499.
 Richard, V.R. 9086.
 Richard, Y. 2353.
 Richards, A.J.M. 3407, 5141.
 Richards, G.P. 5364.
 Richards, R.M.E. 513, 4849.
 Richards, W.D. 665.
 Richardson, G.H. 2731, 2732, 4484, 7866.
 Richardson, K. 3748.
 Richardson, K.E. 2830.
 Richardson, P.E. 6102.
 Richardson, T.C. 3052.
 Richarme, G. 1726.
 Richet, H. 5040.
 Richman, D.D. 595.
 Richmond, D.V. 7142.
 Richmond, S. 9198.
 Richter, E.R. 5088.
 Richter, G. 55, 5354.
 Richter, H. 5354.
 Richter, J. 1154.
 Richter, T. 4179.
 Richter, U. 5471.
 Richter, U. 5471.
 Riccio, J. 2891, 6056, 6309.
 Riccova, A. 5872.
 Rickard, P.A.D. 2566.
 Rickards, R.W. 1444.
 Rico-Munoz, E. 6450.
 Ricci, G. 8963.
 Riddleberger, K.R. 1565.
 Ride, J.P. 2006, 2059, 8305.
 Ridgway, G.L. 8360, 8368.
 Ridgway, H.F. 2383.
 Ridox, C. 1901.
 Riedel, F.M. 5863.
 Riemann, H.P. 4185.
 Riesenmann, H. 3477.
 Riesner, D. 3819, 4152.
 Riffle, J.W. 831, 5592.
 Rigaud, J. 6361.
 Rigby, C.E. 8759.
 Rissner, M.G. 2383.
 Rihs, J.D. 4203.
 Riley, L.W. 7414.
 Rillo, A.R. 7177.
 Rimler, R.B. 723.
 Rimmer, D.L. 5640.
 Rimmer, S.R. 2854.
 Rimon, S. 5148.
 Rinaldi, M.G. 811.
 Rinck, M. 4414.
 Rindone, B. 2715.
 Rinehart, K.L. Jr. 1420, 4051, 5636, 9122, 9123.
 Ringelmann, R. 9047.
 Ringuelet, R. 555.
 Rinker, D.L. 6278.
 Rinzuolo, G. 5673.
 Rios, E.M. 6878.
 Rizzo, C. 861.
 Ripa, S. 6412.
 Riphagen, A. 3806.
 Ripollas, A.A. 770.
 Rippe, D.F. 616.
 Ristridger, G.D. 4831.
 Ritchie, H. 7829.
 Risco, S.H. 3266, 6908.
 Ritche, C.K. 5297, 7583.
 Risko, K.J. 5915.
 Risler, J.L. 2621.
 Rissling, J.P. 514, 6772, 7604.
 Risso, D. 591.
 Ritt, D.L. 8000.
 Ristaino, P.A. 1960.
 Ristuccia, A.M. 8496.
 Ritchie, D.F. 6247, 8810.
 Rittenhouse, J. 5130.
 Ritter, R. 2438.
 Ritter, S. 6553.
 Rittman, B.E. 1461, 1471, 4127.
 Rittmann, E. 4090.
 Rivera, A.L. 4110.
 Rivers, C.M. 9143.
 Rivers, D.B. 8680.
 Rizeva, M.I. 6852.
 Rizek, M. 9041.
 Rizkallah, L.A. 3533.
 Rizki, Y.M. 8999.
 Rizzi, L. 7878.
 Rizzo, A.F. 7578.
 Rizzo, M.F. 3049.
 Roa, M. 4276.
 Robb, D.A. 5174.
 Robbie, L.I. 1625.
 Robins, J.E. 2323, 3191, 7513.
 Robins, R.N. 875.
 Roberge, A.G. 6196.
 Robert, D. 7444.
 Robert, N.C. 9286.
 Roberts, B.A. 7047.
 Roberts, D. 3713.
 Roberts, D.M. 5992.
 Roberts, D.W. 2647, 4227, 5215.
 Roberts, F.J. 1626.
 Roberts, G.C.K. 3462.
 Roberts, G.D. 814, 1581, 1635, 1680, 4159, 9085.
 Roberts, L.M. 4563.
 Roberts, J.J. 4578.
 Roberts, J.W. 730.
 Roberts, M.C. 7588.
 Roberts, M.F. 979, 5520.
 Roberts, N.C. 1590.
 Roberts, P.V. 7502.
 Roberts, R.G. 5453.
 Roberts, S.J. 1160, 8873.
 Roberts, S.M. 5255.
 Roberts, T.A. 4202, 4246.
 Robertson, B. 7178.
 Robertson, C.R. 2.
 Robertson, E.A. 786.
 Robertson, G.H. 1875.
 Robertson, G.M. 4181.
 Robertson, G.P. 4612.
 Robertson, I.G. 4030.
 Robertson, J. 1950.
 Robertson, J.A. 639, 733.
 Robertson, J.G. 2976.
 Robertson, J.H. 8504.
 Robertson, L. 2473.
 Robertson, P. 583.
 Robin, B. 120.
 Robin, T. 6783.
 Robbins-Browne, R.M. 749.
 Robins, R.K. 9116, 9117, 9119.
 Robinson, A.E. 3407, 5141.
 Robinson, B.S. 3220.
 Robinson, C.W. 183, 5276, 5287, 5294.
 Robinson, J. 2767, 8412, 8414.
 Robinson, J.A. 3522, 6574, 6575.
 Robinson, J.B. 5313, 9071.
 Robinson, J.M. 8675.
 Robinson, J.T. 7488.
 Robinson, M.J. 680.
 Robinson, N.A. 7598.
 Robinson, R.A. 2859.
 Robinson, R.K. 5097.
 Robinson, R.W. 5474, 6397.
 Robinson, S.G. 4088.
 Robinson, B.J. 7844.
 Robinson, M.K. 748.
 Robison, P.D. 3496.
 Robles Romo, M. 9080.
 Robson, A.D. 3935, 7253, 8217, 8.
 Robson, J. 1642.
 Robson, J.M. 5182.
 Robson, P.M. 7783.
 Robustova, T.G. 7405.
 Roby, J.F. 1744, 5147, 6830.
 Rocha-Pena, M.A. 8060.
 Rocha, G.P. 5358.
 Rochow, W.F. 260, 5892, 8796.
 Rodak, R. 2420.
 Rodenbach, S. 5746.
 Rockhill, R. 2767.
 Rockhill, R.C. 9288.
 Roda, A. 5131.
 Roda, L.G. 3753.
 Rodas, R. 7829.
 Rodda, E.D. 5290.
 Roddick, F. 989.
 Rodner, D.M. 3220.
 Rodgers, F.G. 7451.
 Rodgers, P. 6483.
 Rodionova, N.A. 4320, 4342, 4346, 4349, 5991, 6857, 7727, 7744, 7752.
 Rodolop, A.K. 4045, 4417, 5171, 7813.
 Rodolop, J.G. 7405.
 Rodrigo, J. 9100.
 Rodriguez Ferri, E. 4951.
 Rodriguez-Garcia, J. 4588.
 Rodriguez-Kabana, R. 2937.
 Rodriguez, D. 110.
 Rodriguez, D.S. 5829.
 Rodriguez, E. 153.
 Rodriguez, F.C. 4719, 4850.
 Rodriguez, H. 4353.
 Rodriguez, M.I. 5077.
 Rodriguez, M.J. 7656.
 Roebelen, G. 2834, 8081.
 Roehman, M. 7153.
 Roelfs, A.P. 265, 1125, 7922, 80.
 Roelofs, W. 2969, 4594.
 Roels, J.A. 853, 2427.
 Roemer, A. 2716.
 Roemmel, G. 1440.
 Roemer, B. 232.
 Roginski, H. 7862, 7863.
 Rogol, M. 782.
 Rohde, R. 7858.
 Rohrbach, K.G. 8834.
 Rohrich, P.J. 4787.
 Rohrig, T.P. 223.
 Roi, A.A. 1007.
 Roig, A. 8168.
 Roig, J.M. 1640.
 Roisin, A.J.M. 4949.
 Roizman, B. 6622.
 Rojas Ramirez, E. 5361.

- Rokem, J.S. 4375.
 Rolz, J. 4874.
 Roland, G. 5391.
 Roland, J.O. 1926, 6207.
 Rolletto, E. 4099.
 Rolle, B.G. 2167, 9006.
 Roloff, S.D. 5242, 5243, 6099, 6101.
 Rollin, C.F. 7728.
 Rollin, P. 6629.
 Rolston, K.V.I. 6434.
 Rolz, C. 5272, 7515.
 Romagnoli, G. 6409.
 Roman, G.M. 3569, 3644.
 Romani, G. 8739.
 Romanuk, P.J. 622.
 Romankiewicz, J.A. 536.
 Romano, L.S. 4082.
 Romano, P. 5268.
 Romanov, V.I. 9022.
 Romanova, T.N. 4044.
 Romanova, T.P. 5112.
 Romanov, F.E. 1793, 8594.
 Romero, B.R. 1471.
 Romero, E. 2194, 9078.
 Romero, P. 1492.
 Romel-Lemonne, J. 6607.
 Romette, J.L. 38.
 Romeyko, I.N. 2140.
 Romond, C. 6549.
 Ronald, A.R. 3027, 6780.
 Ronalds, C.J. 5005.
 Roncaroli, R.W. 392.
 Roncardi, R.W. 371.
 Rondina, R.V.D. 4012.
 Ronnberg, B. 8748.
 Ronn, J.F. 1893.
 Root, J.J. 3013, 7757.
 Roode, D.M. 1401, 7320, 7379.
 Rook, J.C. 2743.
 Roome, A. 3242.
 Rooney, J. 2326.
 Roos, I.M.M. 274, 2801.
 Roose, D. 6271.
 Roper, M.M. 7292.
 Roroff, T. 6516.
 Roquebert, M.-F. 2052.
 Rosan, B. 5070.
 Rosas, I. 4924.
 Rosazza, J.P.N. 6031.
 Roscetti, G. 3753.
 Rosciglione, B. 3844.
 Rosdahl, V.T. 2203.
 Rose, A.H. 1683.
 Rose, D.J. 6178.
 Rose, H.D. 3222.
 Rose, J.B. 4952, 7533.
 Rose, R. 6083, 776.
 Rosen, B.P. 3026.
 Rosen, J.D. 6206.
 Rosen, R.T. 6206.
 Rosen, W. 1711.
 Rosenberg, C. 4660.
 Rosenberg, E. 1421, 3552, 9211.
 Rosenberg, M. 776.
 Rosenberger, D.A. 3818.
 Rosenblatt, J.E. 432, 453, 488, 7407.
 Rosendal, K. 2203.
 Rosendal, S. 739.
 Rosenfeld, S. 983, 5157.
 Rosenkranz, E. 2838.
 Rosencryst, E. 3325.
 Rosenthal, S.A. 1678.
 Roser, D. 6766.
 Rosevear, A. 8577.
 Roskosh, J.P. 4645.
 Rossm, F. 4940.
 Ross, D.H. 6919.
 Ross, D.J. 403, 7247.
 Ross, E.J. 1859.
 Ross, P.F. 3699.
 Ross, R.C. 1681.
 Rossello, A. 4823.
 Rossi, R. 3712.
 Rossetto, C.J. 5440.
 Rossi, A. 7696.
 Rossi, A.E. 7983, 8794.
 Rossi, C. 8742.
 Rossi, C.R. 5890.
 Rossi, F. 6931, 6992, 7816.
 Rossi, E. 5665.
 Rossignol, G. 7131.
 Rossman, E.C. 4580.
 Rossman, P. 6532.
 Rossmore, H.W. 1512.
 Rossouw, F.T. 4724.
 Rossova, E.Ya. 6755.
 Rossow, T. 5665.
 Rosstomly, R. 2655.
 Rotem, J. 321, 4548.
 Roth, P. 8510.
 Rothenberg, P.J. 6918.
 Rothstein, R.J. 816, 817.
 Rothwell, F.M. 5564.
 Rotmistrov, M.N. 4343, 6030, 6952, 8592, 8593, 8594, 8595, 8596, 8597, 8598, 8599, 8600, 8601, 8602, 8603, 8604, 8605, 8606, 8607, 8608, 8609, 8610, 8611, 8612, 8613, 8614, 8615, 8616, 8617, 8618, 8619, 8620, 8621, 8622, 8623, 8624, 8625, 8626, 8627, 8628, 8629, 8630, 8631, 8632, 8633, 8634, 8635, 8636, 8637, 8638, 8639, 8640, 8641, 8642, 8643, 8644, 8645, 8646, 8647, 8648, 8649, 8650, 8651, 8652, 8653, 8654, 8655, 8656, 8657, 8658, 8659, 8660, 8661, 8662, 8663, 8664, 8665, 8666, 8667, 8668, 8669, 8670, 8671, 8672, 8673, 8674, 8675, 8676, 8677, 8678, 8679, 8680, 8681, 8682, 8683, 8684, 8685, 8686, 8687, 8688, 8689, 8690, 8691, 8692, 8693, 8694, 8695, 8696, 8697, 8698, 8699, 8700, 8701, 8702, 8703, 8704, 8705, 8706, 8707, 8708, 8709, 8710, 8711, 8712, 8713, 8714, 8715, 8716, 8717, 8718, 8719, 8720, 8721, 8722, 8723, 8724, 8725, 8726, 8727, 8728, 8729, 8730, 8731, 8732, 8733, 8734, 8735, 8736, 8737, 8738, 8739, 8740, 8741, 8742, 8743, 8744, 8745, 8746, 8747, 8748, 8749, 8750, 8751, 8752, 8753, 8754, 8755, 8756, 8757, 8758, 8759, 8760, 8761, 8762, 8763, 8764, 8765, 8766, 8767, 8768, 8769, 8770, 8771, 8772, 8773, 8774, 8775, 8776, 8777, 8778, 8779, 8780, 8781, 8782, 8783, 8784, 8785, 8786, 8787, 8788, 8789, 8790, 8791, 8792, 8793, 8794, 8795, 8796, 8797, 8798, 8799, 8800, 8801, 8802, 8803, 8804, 8805, 8806, 8807, 8808, 8809, 8810, 8811, 8812, 8813, 8814, 8815, 8816, 8817, 8818, 8819, 8820, 8821, 8822, 8823, 8824, 8825, 8826, 8827, 8828, 8829, 8830, 8831, 8832, 8833, 8834, 8835, 8836, 8837, 8838, 8839, 8840, 8841, 8842, 8843, 8844, 8845, 8846, 8847, 8848, 8849, 8850, 8851, 8852, 8853, 8854, 8855, 8856, 8857, 8858, 8859, 8860, 8861, 8862, 8863, 8864, 8865, 8866, 8867, 8868, 8869, 8870, 8871, 8872, 8873, 8874, 8875, 8876, 8877, 8878, 8879, 8880, 8881, 8882, 8883, 8884, 8885, 8886, 8887, 8888, 8889, 8890, 8891, 8892, 8893, 8894, 8895, 8896, 8897, 8898, 8899, 8900, 8901, 8902, 8903, 8904, 8905, 8906, 8907, 8908, 8909, 8910, 8911, 8912, 8913, 8914, 8915, 8916, 8917, 8918, 8919, 8920, 8921, 8922, 8923, 8924, 8925, 8926, 8927, 8928, 8929, 8930, 8931, 8932, 8933, 8934, 8935, 8936, 8937, 8938, 8939, 8940, 8941, 8942, 8943, 8944, 8945, 8946, 8947, 8948, 8949, 8950, 8951, 8952, 8953, 8954, 8955, 8956, 8957, 8958, 8959, 8960, 8961, 8962, 8963, 8964, 8965, 8966, 8967, 8968, 8969, 8970, 8971, 8972, 8973, 8974, 8975, 8976, 8977, 8978, 8979, 8980, 8981, 8982, 8983, 8984, 8985, 8986, 8987, 8988, 8989, 8990, 8991, 8992, 8993, 8994, 8995, 8996, 8997, 8998, 8999, 9000, 9001, 9002, 9003, 9004, 9005, 9006, 9007, 9008, 9009, 9010, 9011, 9012, 9013, 9014, 9015, 9016, 9017, 9018, 9019, 9020, 9021, 9022, 9023, 9024, 9025, 9026, 9027, 9028, 9029, 9030, 9031, 9032, 9033, 9034, 9035, 9036, 9037, 9038, 9039, 9040, 9041, 9042, 9043, 9044, 9045, 9046, 9047, 9048, 9049, 9050, 9051, 9052, 9053, 9054, 9055, 9056, 9057, 9058, 9059, 9060, 9061, 9062, 9063, 9064, 9065, 9066, 9067, 9068, 9069, 9070, 9071, 9072, 9073, 9074, 9075, 9076, 9077, 9078, 9079, 9080, 9081, 9082, 9083, 9084, 9085, 9086, 9087, 9088, 9089, 9090, 9091, 9092, 9093, 9094, 9095, 9096, 9097, 9098, 9099, 9100, 9101, 9102, 9103, 9104, 9105, 9106, 9107, 9108, 9109, 9110, 9111, 9112, 9113, 9114, 9115, 9116, 9117, 9118, 9119, 9120, 9121, 9122, 9123, 9124, 9125, 9126, 9127, 9128, 9129, 9130, 9131, 9132, 9133, 9134, 9135, 9136, 9137, 9138, 9139, 9140, 9141, 9142, 9143, 9144, 9145, 9146, 9147, 9148, 9149, 9150, 9151, 9152, 9153, 9154, 9155, 9156, 9157, 9158, 9159, 9160, 9161, 9162, 9163, 9164, 9165, 9166, 9167, 9168, 9169, 9170, 9171, 9172, 9173, 9174, 9175, 9176, 9177, 9178, 9179, 9180, 9181, 9182, 9183, 9184, 9185, 9186, 9187, 9188, 9189, 9190, 9191, 9192, 9193, 9194, 9195, 9196, 9197, 9198, 9199, 9200, 9201, 9202, 9203, 9204, 9205, 9206, 9207, 9208, 9209, 9210, 9211, 9212, 9213, 9214, 9215, 9216, 9217, 9218, 9219, 9220, 9221, 9222, 9223, 9224, 9225, 9226, 9227, 9228, 9229, 9230, 9231, 9232, 9233, 9234, 9235, 9236, 9237, 9238, 9239, 9240, 9241, 9242, 9243, 9244, 9245, 9246, 9247, 9248, 9249, 9250, 9251, 9252, 9253, 9254, 9255, 9256, 9257, 9258, 9259, 9260, 9261, 9262, 9263, 9264, 9265, 9266, 9267, 9268, 9269, 9270, 9271, 9272, 9273, 9274, 9275, 9276, 9277, 9278, 9279, 9280, 9281, 9282, 9283, 9284, 9285, 9286, 9287, 9288, 9289, 9290, 9291, 9292, 9293, 9294, 9295, 9296, 9297, 9298, 9299, 9300, 9301, 9302, 9303, 9304, 9305, 9306, 9307, 9308, 9309, 9310, 9311, 9312, 9313, 9314, 9315, 9316, 9317, 9318, 9319, 9320, 9321, 9322, 9323, 9324, 9325, 9326, 9327, 9328, 9329, 9330, 9331, 9332, 9333, 9334, 9335, 9336, 9337, 9338, 9339, 9340, 9341, 9342, 9343, 9344, 9345, 9346, 9347, 9348, 9349, 9350, 9351, 9352, 9353, 9354, 9355, 9356, 9357, 9358, 9359, 9360, 9361, 9362, 9363, 9364, 9365, 9366, 9367, 9368, 9369, 9370, 9371, 9372, 9373, 9374, 9375, 9376, 9377, 9378, 9379, 9380, 9381, 9382, 9383, 9384, 9385, 9386, 9387, 9388, 9389, 9390, 9391, 9392, 9393, 9394, 9395, 9396, 9397, 9398, 9399, 9400, 9401, 9402, 9403, 9404, 9405, 9406, 9407, 9408, 9409, 9410, 9411, 9412, 9413, 9414, 9415, 9416, 9417, 9418, 9419, 9420, 9421, 9422, 9423, 9424, 9425, 9426, 9427, 9428, 9429, 9430, 9431, 9432, 9433, 9434, 9435, 9436, 9437, 9438, 9439, 9440, 9441, 9442, 9443, 9444, 9445, 9446, 9447, 9448, 9449, 9450, 9451, 9452, 9453, 9454, 9455, 9456, 9457, 9458, 9459, 9460, 9461, 9462, 9463, 9464, 9465, 9466, 9467, 9468, 9469, 9470, 9471, 9472, 9473, 9474, 9475, 9476, 9477, 9478, 9479, 9480, 9481, 9482, 9483, 9484, 9485, 9486, 9487, 9488, 9489, 9490, 9491, 9492, 9493, 9494, 9495, 9496, 9497, 9498, 9499, 9500, 9501, 9502, 9503, 9504, 9505, 9506, 9507, 9508, 9509, 9510, 9511, 9512, 9513, 9514, 9515, 9516, 9517, 9518, 9519, 9520, 9521, 9522, 9523, 9524, 9525, 9526, 9527, 9528, 9529, 9530, 9531, 9532, 9533, 9534, 9535, 9536, 9537, 9538, 9539, 9540, 9541, 9542, 9543, 9544, 9545, 9546, 9547, 9548, 9549, 9550, 9551, 9552, 9553, 9554, 9555, 9556, 9557, 9558, 9559, 9560, 9561, 9562, 9563, 9564, 9565, 9566, 9567, 9568, 9569, 9570, 9571, 9572, 9573, 9574, 9575, 9576, 9577, 9578, 9579, 9580, 9581, 9582, 9583, 9584, 9585, 9586, 9587, 9588, 9589, 9590, 9591, 9592, 9593, 9594, 9595, 9596, 9597, 9598, 9599, 9600, 9601, 9602, 9603, 9604, 9605, 9606, 9607, 9608, 9609, 9610, 9611, 9612, 9613, 9614, 9615, 9616, 9617, 9618, 9619, 9620, 9621, 9622, 9623, 9624, 9625, 9626, 9627, 9628, 9629, 9630, 9631, 9632, 9633, 9634, 9635, 9636, 9637, 9638, 9639, 9640, 9641, 9642, 9643, 9644, 9645, 9646, 9647, 9648, 9649, 9650, 9651, 9652, 9653, 9654, 9655, 9656, 9657, 9658, 9659, 9660, 9661, 9662, 9663, 9664, 9665, 9666, 9667, 9668, 9669, 9670, 9671, 9672, 9673, 9674, 9675, 9676, 9677, 9678, 9679, 9680, 9681, 9682, 9683, 9684, 9685, 9686, 9687, 9688, 9689, 9690, 9691, 9692, 9693, 9694, 9695, 9696, 9697, 9698, 9699, 9700, 9701, 9702, 9703, 9704, 9705, 9706, 9707, 9708, 9709, 9710, 9711, 9712, 9713, 9714, 9715, 9716, 9717, 9718, 9719, 9720, 9721, 9722, 9723, 9724, 9725, 9726, 9727, 9728, 9729, 9730, 9731, 9732, 9733, 9734, 9735, 9736, 9737, 9738, 9739, 9740, 9741, 9742, 9743, 9744, 9745, 9746, 9747, 9748, 9749, 9750, 9751, 9752, 9753, 9754, 9755, 9756, 9757, 9758, 9759, 9760, 9761, 9762, 9763, 9764, 9765, 9766, 9767, 9768, 9769, 9770, 9771, 9772, 9773, 9774, 9775, 9776, 9777, 9778, 9779, 9780, 9781, 9782, 9783, 9784, 9785, 9786, 9787, 9788, 9789, 9790, 9791, 9792, 9793, 9794, 9795, 9796, 9797, 9798, 9799, 9800, 9801, 9802, 9803, 9804, 9805, 9806, 9807, 9808, 9809, 9810, 9811, 9812, 9813, 9814, 9815, 9816, 9817, 9818, 9819, 9820, 9821, 9822, 9823, 9824, 9825, 9826, 9827, 9828, 9829, 9830, 9831, 9832, 9833, 9834, 9835, 9836, 9837, 9838, 9839, 9840, 9841, 9842, 9843, 9844, 9845, 9846, 9847, 9848, 9849, 9850, 9851, 9852, 9853, 9854, 9855, 9856, 9857, 9858, 9859, 9860, 9861, 9862, 9863, 9864, 9865, 9866, 9867, 9868, 9869, 9870, 9871, 9872, 9873, 9874, 9875, 9876, 9877, 9878, 9879, 9880, 9881, 9882, 9883, 9884, 9885, 9886, 9887, 9888, 9889, 9890, 9891, 9892, 9893, 9894, 9895, 9896, 9897, 9898, 9899, 9900, 9901, 9902, 9903, 9904, 9905, 9906, 9907, 9908, 9909, 9910, 9911, 9912, 9913, 9914, 9915, 9916, 9917, 9918, 9919, 9920, 9921, 9922, 9923, 9924, 9925, 9926, 9927, 9928, 9929, 9930, 9931, 9932, 9933, 9934, 9935, 9936, 9937, 9938, 9939, 9940, 9941, 9942, 9943, 9944, 9945, 9946, 9947, 9948, 9949, 9950, 9951, 9952, 9953, 9954, 9955, 9956, 9957, 9958, 9959, 9960, 9961, 9962, 9963, 9964, 9965, 9966, 9967, 9968, 9969, 9970, 9971, 9972, 9973, 9974, 9975, 9976, 9977, 9978, 9979, 9980, 9981, 9982, 9983, 9984, 9985, 9986, 9987, 9988, 9989, 9990, 9991, 9992, 9993, 9994, 9995, 9996, 9997, 9998, 9999, 10000.

- Sariastani, F.S. 6031.
 Saribay, A. 337, 2078.
 Sarig, S. 5657, 6367.
 Sarkar, C. 6023.
 Sarkar, D. 167.
 Sarkinen, H. 3238.
 Sarma, D.K. 5758.
 Sarma, G. 7410.
 Sarma, K.K.V. 6987.
 Sarma, P. 7172.
 Sarma, R. 5382.
 Sarma, A.K. 5758, 7410.
 Sarov, I. 2476, 6734.
 Saru, K.O. 3174.
 Sartain, J.B. 8785.
 Sarubbi, F.A., Jr. 2410.
 Sarver, N. 629.
 Sasahara, M. 3201.
 Sasahara, T. 3208, 4091.
 Sasajima, K.-I. 1786, 5204.
 Sasaki, H. 455.
 Sasaki, J. 3501.
 Sasaki, M. 4923.
 Sasaki, S. 573.
 Sasaki, T. 1874.
 Sasaki, Y. 1398.
 Sashihara, N. 7682.
 Sasmal, D. 3529.
 Sassa, T. 1953.
 Sastry, K.S. 1312.
 Sathiyaraj, K.S.M. 13.
 Satake, M. 6630.
 Sataraova, D.E. 4689.
 Satchell, J.E. 7265.
 Sathapattayavongs, B. 7622.
 Sathiyamoorthy, V. 1909.
 Sato, K. 1874.
 Sato, A. 4685.
 Sato, F. 8212.
 Sato, K. 1062, 2444, 5886, 6339, 6891.
 Sato, M. 2246, 6005.
 Sato, M.I. 4950.
 Sato, M.I.Z. 7535.
 Sato, S. 2310, 3291, 3585, 8011.
 Sato, T. 7, 5102, 8011.
 Sato, Y. 1895, 3112, 3176.
 Sautbet, D. 3312.
 Sato, Z. 7112.
 Sato, A. 5905.
 Satoh, S. 2302.
 Satoh, Y. 3115.
 Satta, G. 3102, 4324, 8610.
 Sathya, S. 5254.
 Sattar, S.A. 2232, 4955, 7538.
 Satterlee, L. 8221.
 Sattler, K. 8510.
 Satyaprasad, K. 5618.
 Sauber, K. 74.
 Saubert, M.I. 4685.
 Sauder, M.E. 5193.
 Sauer, D.B. 8056, 8724.
 Sauer, F.D. 9035.
 Sauerman, D.M. 6085.
 Sauerwald, M. 2359.
 Saurwein, J.R. 9056.
 Saunders, K. 6635.
 Sauvage, D. 2159.
 Sauvageau, R. 8234.
 Savage, P.K. 5017.
 Savage, S.D. 2041.
 Savai, S. 3415, 5189.
 Savant, N.K. 3965.
 Savard, E.V. 1586.
 Savel, J. 1872, 6147.
 Savell, J.W. 5362.
 Savelyeva, N.M. 2885.
 Savino, V. 2018, 3844, 5451, 6248.
 Savitskaya, E.M. 4689.
 Saviuk, O.S. 4942.
 Sawada, H. 121, 8373.
 Sawada, S. 4311.
 Sawada, T. 723, 4695.
 Sawar, K. 8735.
 Sawai, T. 1489, 2317, 2619, 4862.
 Sawamura, K. 8735.
 Sawano, T. 5964, 8503.
 Sawant, N.M. 8775.
 Sawant, U.D. 7811.
 Sawaura, Y. 5071.
 Sawczy, M.K. 7012, 7013.
 Sawhney, B.L. 8976.
 Sawhney, R.N. 2054.
 Sawyer, C.L. 1477.
 Sawyer, T.K. 2389.
 Sawyers, A. 440.
 Saxena, K.K. 7018.
 Saxena, M. 4247, 9139.
 Saxena, M.B.L. 5427.
 Saxena, R.C. 6299.
 Saxena, S.K. 1325.
 Saxena, S.N. 3042.
 Saxena, S.P. 8735.
 Saxinger, C. 4163.
 Sayag, D. 4100, 5837.
 Sayem-Ei-Daher, N. 6196.
 Sayler, G.S. 3682.
 Sazykin, A.Yu. 26, 8562.
 Scaglione, F. 6463.
 Scallih, T.A. 9123.
 Scalamogna, A. 6721.
 Scall, B. 7497.
 Scalzo, M. 3169, 3171.
 Scarpino, P.V. 3198.
 Scarpino, V. 4096.
 Scatagood, E.M. 4077.
 Schaad, N.W. 287, 4199.
 Schaffer, K.P. 4181.
 Schaberg, D.R. 4708.
 Schable, C.A. 640.
 Schachtelle, C.F. 6991.
 Schachter, J. 753, 760, 2492, 4196.
 Schade, J.E. 7101.
 Schade, W. 116, 5084, 5095.
 Schaefer-Seidler, C.E. 7841.
 Schaefer, C.H. 134.
 Schaefer, E.J. 154.
 Schaefer, J.F. 8069.
 Schaffer, F.L. 1574.
 Schairer, H.J. 3479.
 Schallenberg, W. 2551.
 Schaller, K. 6116.
 Schank, S.C. 1275, 5661.
 Schaper, P.J. 1618.
 Schaub, S.A. 1456.
 Schatz, K. 3877.
 Schachmeister, L.L. 1364.
 Schek, R.M. 7665.
 Scheffer, J.J. 2081.
 Schaffer, R.P. 6222, 7233, 7902.
 Scheffer, T.C. 7242.
 Schefers, W.A. 991, 3446, 5285.
 Scheffeld, F. 9218.
 Scheiding, W. 2696, 5958.
 Schlein, R.D. 5502.
 Schell, W.M. 8362.
 Schell, W. 3121.
 Schell, T.F. 2458.
 Schenck, N.C. 240, 843, 1233, 2134, 5626.
 Scher, F.M. 1267, 4639.
 Schertba, G. 468, 617.
 Scher, J. 1712.
 Scherer, P. 3269.
 Scherhings, G. 885.
 Scherz, H. 8538.
 Schreuber, P.H. 233.
 Schierich, P. 6461.
 Schick, B. 8274.
 Schick, F.J. 340.
 Schick, L.A. 604.
 Schieber, E. 2798.
 Schillers, B. 2990.
 Schiffman, G. 2233, 3356.
 Schild, G.C. 6824.
 Schilling, J. 569.
 Schimanski, H.-H. 8003.
 Schimanti, J. 60.
 Schimpff, S.C. 7431, 9186.
 Schinazi, R.F. 5750.
 Schindler, J. 4239.
 Schindler, S.C. 1230.
 Schioppacassi, G. 2282.
 Schippers, B. 2830, 2831.
 Schisler, D.A. 5539.
 Chito, G.C. 9126.
 Schlabach, A.J. 4077.
 Schlatter, C. 1915.
 Schlegel, H.G. 150, 3461, 8552.
 Schleifer, K.H. 8584.
 Schlepshukin, A.N. 3066.
 Schleser, G. 1700.
 Schless, J.F. 8731.
 Schleyer, M.H. 3005.
 Schlicker, C. 6441, 6963.
 Schliemann, W. 8567.
 Schlievert, P.M. 7116.
 Schlichter, R.L. 608, 5871.
 Schmoer, N. 723.
 Schmid, E. 2500.
 Schmid, G. 2237, 3173.
 Schmid, G.P. 2494.
 Schmid, R. 4299.
 Schmid, R.D. 64.
 Schmidt-Lorenz, W. 9336.
 Schmidt, A. 8204, 8456.
 Schmidt, B.L. 2500.
 Schmidt, E. 182.
 Schmidt, E.A. 7544.
 Schmidt, E.L. 386, 4641.
 Schmidt, H.-L. 875.
 Schmidt, J.L. 5242.
 Schmidt, J.N. 644, 1549, 4158, 9274.
 Schmidt, O.W. 601.
 Schmidt, R. 3739.
 Schmidt, R.A. 3921.
 Schmidt, R.H. 2576, 6927.
 Schmidt, S.K. 382.
 Schmidt, U. 1838.
 Schmidt, W. 7576.
 Schmitt, U. 2816.
 Schmittner, A.F. 8079, 8085, 8086.
 Schmitz, H. 1568.
 Schmitz, J.A. 3056.
 Schmoenburger, H. 6819.
 Schmoerson, R. 2323.
 Schneider, A. 491.
 Schneider, G. 6001.
 Schneider, G.M. 2966.
 Schneider, H. 147, 3595, 3621, 5873.
 Schneider, K. 3461.
 Schneider, P. 79.
 Schneider, R.W. 328, 6306.
 Schneider, R.W. 2375.
 Schnell, D.J. 2661.
 Schnetzer, W. 3569.
 Schnipper, L. 3057.
 Schobert, S.M. 5821, 6819.
 Schoch, U. 1915.
 Schoebitz, R. 5073.
 Schoellkopf, U. 8338.
 Schoelmenich, J. 23, 3482.
 Schone, C. 3455.
 Schonefelder, H. 2691, 6932.
 Schonenweiss, D.F. 4614.
 Schoenholzer, P. 6538.
 Schoepf, V. 29.
 Sholes, J.V. 3313.
 Sholte, K. 1998.
 Sholtissek, C. 6606.
 Schornburg, I. 9234.
 Schoolnik, G. 3354.
 Schraa, G. 4926.
 Schram, E. 6696, 8409.
 Schran, P. 5044.
 Schrammek, E. 2359.
 Schraufmack, E.D. 3221.
 Schreckenberger, P.C. 670.
 Schreiber, J. 6071.
 Schreiber, L.R. 5720.
 Schreiner, J.G. 7813.
 Schroeder, E.D. 1473.
 Schroeder, K.H. 7580.
 Schroeder, H.-P. 1754, 9124.
 Schroeter, G. 4793.
 Schroyer, B. 3065.
 Schudwick, A.K. 780.
 Schubert, R. 5354.
 Schuchalter-Eicke, G. 4541, 8815.
 Schuepp, H. 3991.
 Schuegerl, K. 1711, 2696.
 Schuermann, W. 591.
 Schuetz, H. 3147, 4303, 4306, 8586.
 Schulten, P. 2349.
 Schuller, P.L. 7065.
 Schulman, R. 1318.
 Schulte, T.H. 5044.
 Schultze, A. 1973, 4557, 8020.
 Schulz, G.E. 6004.
 Schulze, E. 3218, 8413.
 Schultze, K. 8718.
 Schulze, T. 2494.
 Schumacher, H.R. 3344.
 Schumacher, J. 3919, 4152.
 Schumacher, P.W. 1456.
 Schumann, B. 8135.
 Schumann, P. 8432.
 Schunck, W.H. 7307.
 Schuster, G. 3970, 4575, 4575, 4775, 5275.
 Schuster, S. 131, 3563.
 Schutte, H. 61.
 Schutte, F. 5028.
 Schvester, P. 5281.
 Schwab, B. 3110.
 Schwab, S.M. 8200.
 Schwabe, W.F.S. 2797, 3881.
 Schwann, T.J. 1391.
 Schwartz, R.D. 8474.
 Schwarz, C.J. 1493.
 Schwarzbach, E. 3882.
 Schwarzb, B.R.J. 5845.
 Schweickert, M.J. 4772.
 Schweinstaur, P. 5341.
 Schweisfurth, R. 6386.
 Schweitzer, K. 4743.
 Schweizer, E. 9089.
 Schwencke, J. 1801.
 Schwens, A. 6471, 6476.
 Schwinka, Yu. 114.
 Schwintzer, C.R. 4607, 4608, 8244, 9001.
 Sciamanna, A. 3386.
 Scialovino, F.C. 3123.
 Sciol, C. 3032.
 Scipioni, R. 7878.
 Scoggin, D.A. 1413.
 Scoglio, M.E. 567.
 Scolicnik, E.M. 6592, 6603.
 Scopes, R.K. 4293, 4294.
 Soarza, R. 3813, 5487.
 Soiland, S.M. 1935.
 Scott, A. 2927, 8735.
 Scott, A.C. 8434.
 Scott, A.I. 5777.
 Scott, C.D. 3638, 4248, 5293, 5943.
 Scott, D. 7823.
 Scott, D.B. 264.
 Scott, E. 7575.
 Scott, E.M. 1340, 1362, 5738.
 Scott, E.N. 602.
 Scott, E.S. 8953.
 Scott, G.B. 1584.
 Scott, G.E. 2838, 8071, 8074, 8724, 8880.
 Scott, G.K. 8022.
 Scott, H.A. 8822.
 Scott, J.J. 1966.
 Scott, K.F. 2977.
 Scott, K.J. 251.
 Scott, K.R. 2235.
 Scott, P.M. 3737, 5372, 7050, 7063, 7890.
 Scott, R.E. 5796.
 Scott, R.I. 1458, 4144, 4403.
 Scott, S.W. 7132, 8445.
 Scott, T.A. 2963.
 Scott, T.W. 1271.
 Scott, W.M. 2403.
 Scott, R. 6571.
 Scottolini, A.G. 7571, 7574.
 Scovill, J.P. 7372.
 Scribner, G.H. 5930.
 Seagratt, V. 6590.
 Seagratt, V.A. 4488.
 Seal, K.J. 1034, 2719.
 Seals, J.E. 7414.
 Seaman, J.T. 5879.
 Seare, T. 3574.
 Seapra, J.L. 5044.
 Sears, S.D. 6717.
 Sebastiani, E. 1867.
 Sebek, O.K. 5792.
 Sebesta, J. 3868.
 Sebranek, J. 7886.
 Sechler, H.J. 7813.
 Sechter, I. 762.
 Seckarova, A. 9043.
 Secker, D.A. 446.
 Secor, G.A. 2820.
 Sedewitz, B. 8584.
 Sedgwick, A.K. 780.
 Sedra, R.K. 1715.
 Sedlock, D.M. 707.
 Sedova, T.A. 3179.
 Seebach, D. 7768, 8654.
 Seebauer, G.E. 1413.
 Seebauer, A.H. 4711.
 Seeger, R. 5341.
 Seely, S.D. 5866.
 Seem, R.C. 1098, 7127, 8833.
 Seenanapa, M. 3795, 7088.
 Seeta, R. 3451, 3464.
 Seifens, W. 4392.
 Segers, L. 1843.
 Segov, D. 3424.
 Seghal, V.K. 5970.
 Segura, C. 4746, 8290.
 Seghal, S.N. 3131.
 Seibert, G. 3100, 4735.
 Seibold, G. 6246.
 Seibt, S.L. 7850.
 Seichert, L. 1708, 6814.
 Seid, G. 5734.
 Seidel, H. 6940.
 Seidel, K. 2363.
 Seidel, K.M. 2431.
 Seidler, R.J. 6433.
 Seidlin, M. 8452.
 Seidman, M. 5167.
 Seifers, D.L. 8075.
 Seifman, T.J. 1391.
 Seifert, R. 3405.
 Seiler, D.A.L. 195.
 Seiler, H. 6998.
 Seiner, V.S. 6564.
 Sekhon, H.S. 5677.
 Seki, M. 186.
 Sekine, T. 1464.
 Sekine, Y. 953.
 Sekizaki, T. 5718.
 Sela, I. 4499.
 Sela, M. 7678, 6654.
 Selasie, C.D. 4323.
 Selby, L.A. 2452.
 Selecky, J. 6978.
 Selig, E. 2392.
 Seligak, S.T. 3078, 3106.
 Selizneva, A.A. 6827, 7672.
 Selig, V.L. 6874.
 Selim, M. 3566, 6746.
 Selim, M.H. 6070, 6899.
 Sell, N.J. 7781.
 Selling, B.H. 7559.
 Sell, L.H. 1436, 1442.
 Selsted, A. 4609, 8152.
 Selva, E. 6568.
 Selvendran, R.R. 4369.
 Semal, J. 2899.
 Semancik, J.S. 3247.
 Semb, L. 8116.
 Semboku, T. 8773.
 Semenov, S.M. 476.
 Semenova, E.V. 8615.
 Semin, Yu.A. 6451.
 Semina, I.E. 8549.
 Semple, K.M. 7310.
 Semrau, K.T. 7814.
 Sen Gupta, P. 2087, 8793.
 Sen, A.K. 3183.
 Sen, C. 2133.
 Sen, D. 5380, 7291, 9019.
 Sen, G.C. 4778.
 Sen, K. 1351, 4265.
 Sen, S. 1161.
 Sen, S.K. 1732.
 Sen, S.P. 2973.
 Senanayake, S. 7938.
 Senaratne, A. 2398.
 Senda, M. 3440.
 Sendai, M. 5115.
 Senoz, J.A. 2706.
 Sengupta, A.K. 4018.
 Sengupta, S. 3527, 6873.
 Seno, A.E. 898.
 Senise, J.T. 8682.
 Seno, T. 6061.
 Senoz, J.A. 2706.
 Senoz, J.A. 2706.
 Senyik, G.F. 4445, 4448.
 Seong, S.Y. 6438.
 Seong, B.L. 2248.
 Sepaenen, E. 1146, 2030, 2070.
 Sepi, T. 7171, 7173.
 Sepkowitz, H. 4932.
 Sequeira, L. 1102, 5484, 6282, 716.
 Serbranyan, M.Z. 1287.
 Seregina, L.M. 1889.
 Sereno, M. 6595.
 Sergienko, O.V. 2319.
 Serizawa, N. 519, 2302.
 Serizawa, N. 519, 2302.
 Serrano, F.C. 6923.
 Shadrin, S.K. 1487.
 Sethi, K.K. 2501.
 Sethi, N. 4016.
 Sethi, R.P. 145, 146, 2669.
 Sessa, G. 5970.
 Sethunathan, N. 377.
 Seto, H. 960, 3149, 3532, 9217.
 Seto, K. 4695.
 Setter, E. 5162.
 Setter, T. 9000.
 Seuffer, R. 5878.
 Severy, V. 361, 6137.
 Severin, B.F. 568.
 Severo, P.F. 4706.
 Sewell, G.W.F. 5459.
 Sexton, A.J. 5670.
 Seydoux, F. 6007.
 Seymour, A. 2240.
 Seymour, P.E. 3959.
 Seymour, R.L. 8640.
 Sezaki, H. 455.
 Sezin, E. 2063.
 Sgarbiata, G. 1333.
 Shaban, G.M.M. 7196.
 Shabonowitz, J. 5390.
 Shadklady, C.A. 6794.
 Shadsky, H.J. 582.
 Shadsky, S. 1387, 9104.
 Shafer, B.D. 6414.
 Shafer, S.R. 7920.
 Shafer, W.M. 5761.
 Shah, D.B. 3272.
 Shah, F.H. 3673, 6683, 7889.
 Shah, N.M. 2205.
 Shah, P. 4716.
 Shah, R.B. 3417.
 Shah, R.K. 3696.
 Shalwan, I.M. 7980.
 Shaikh, B.H. 4964.
 Shailubhai, K. 6170.
 Shain, S.S. 1006, 8155.
 Shaker, M.H. 188, 6015.
 Shalaby, S.H. 7443.
 Shambaugh, G.F. 7960.
 Shambe, T. 4354, 6166.
 Shamolina, I.I. 4317.
 Shamsi, S.R.A. 3536.
 Shane, B.S. 4162.
 Shane, W.W. 3849.
 Shanholtzer, C.J. 708, 1618, 3228, 7425, 7609.
 Shankaranarayanan, D. 4783.
 Shankar, D.J. 8331.
 Shannon, K. 497, 6465, 9051.
 Shannon, K.P. 5719.
 Shannon, W. 5369, 5375.

- Shannon, W.M. 5748, 6478.
Shannon, D.C. 2482, 2497.
Shao, K.-P. 7042.
Shao, Q.-Q. 2819.
Shao, X.-Y. 6738.
Shapiro, M. 6601.
Shapiro, J.A. 3988.
Shapiro, M. 6907.
Shapiro, R. 2590.
Shapiro, S. 4053, 4854, 8355.
Shapp, E.L. 3860.
Shapshak, P. 3259.
Sharma, A. 6812.
Shariatpanahi, M. 1284.
Sharma, A.D. 1963.
Sharma, A.K. 8191.
Sharma, B. 9129.
Sharma, D.K. 5307.
Sharma, E. 6320.
Sharma, I.C. 5426, 8069.
Sharma, H.S.S. 1994.
Sharma, I. 8800.
Sharma, I.K. 361.
Sharma, J.K. 4617, 8942.
Sharma, J.R. 8059.
Sharma, S. 4964, 3999.
Sharma, M.R. 2118, 8176, 8177, 8178.
Sharma, O.P. 8819.
Sharma, R.C. 8143.
Sharma, S. 5142.
Sharma, S.C. 8929.
Sharma, S.K. 1606, 2007.
Sharma, N. 4620.
Sharma, S.R. 1181, 2055, 2095, 2902.
Sharma, T.R. 7037.
Sharma, V.K. 2765.
Sharon, E.M. 5592.
Sharp, A.K. 7585.
Sharp, D.N. 3254.
Sharp, E.L. 2863, 2879.
Sharp, J.C.M. 4449.
Sharp, J.M. 7488.
Sharpe, A.H. 6627.
Sharpe, A.N. 3690, 6968, 9285.
Sharpe, P. 1367.
Shashikumar, M. 4764.
Shashkov, A.S. 4362, 8614.
Shatrova, V.M. 493.
Shatlock, A.G. 8456.
Shatlock, R.C. 1401, 7320, 7379, 8034.
Shatuck, G.E. 4468, 7039.
Shaw, B.G. 4446.
Shaw, D.H. 5200.
Shaw, D.S. 8034.
Shaw, E.D. 1584.
Shaw, J.E. 4767.
Shaw, M. 199, 7507.
Shaw, M.C. 8641.
Shaw, W.V. 9052.
Shawky, B.T. 3533, 4647.
Shay, L.K. 5115.
Shcheblykina, L.V. 4321.
Shcheukina, E.V. 5086.
Shcheukova, E.V. 3579.
Shen, S.R. 3842.
Sheaffer, C.C. 2165.
Shearer, B.L. 3842.
Shearer, G. 2169.
Shechter, G. 913.
Sheehan, D.J. 526.
Sheehan, J.P. 9077.
Sheehan, K.C. 6685.
Sheehan, P.L. 8959.
Sheehy, J.E. 2958, 8252.
Sheehy, R.J. 1372.
Sheehy, M. 7657.
Shenata, M.A. 1199, 2852.
Sheik, A.H. 6302.
Sheikh, N.A. 5620.
Sheir, H.M. 2792, 7138.
Shekara Shetty, H. 7984.
Shelatah, M.A. 7886.
Shelatah, M.S. 2732.
Shelly, M.D. 5915.
Shelley, R.A. 2937.
Shelley, S.E. Jr. 6673.
Sheller, L.A. 6492, 8719.
Shelk, G.R. 614.
Shelton, D.R. 2701, 2703, 4438, 5670.
Shenoy, K.M. 8693.
Shen, J.-Y. 7182.
Shenbagamurthy, P. 458, 8311.
Shenderov, B.A. 7359.
Shenderovich, S.P. 1704.
Shenep, J.L. 3412.
Shennan, J.L. 8288.
Shenard, J.F. 1186.
Shepherd, K. 3870.
Shepherd, R.L. 8883.
Sheppard, J.W. 1122.
Sheppard, M. 9284.
Sheptukhov, V.N. 5659.
Sherertz, R.J. 2410.
Sherkar, B.V. 2002, 2004.
Sherrard, J.A. 3193.
Sherrard, J.H. 1479, 4905.
Sherris, J.C. 6417.
Sherstak, S.F. 1769.
Sherwin, J.E. 6366.
Sherwood, J.E. 6368.
Sheshadri, B.S. 9194.
Sheth, N.K. 3222.
Shevchenko, A.A. 7411.
Shevchenko, A.G. 6951.
Shevchenko, S.F. 4398.
Shevchuk, M.S. 3525.
Shevtsov, V.V. 7801.
Shew, B.B. 6239, 7134.
Shew, D.C. 7679.
Shew, H.D. 8133.
Shi, J.P. 8573.
Shibagaki, H. 5208.
Shibai, H. 1439, 3134, 4059, 4061.
Shibasaki, I. 2218, 7527.
Shibata, H. 577.
Shibata, K. 5996.
Shibata, M. 3161, 4286, 5105.
Shibata, S. 466.
Shibata, M. 576, 7756.
Shibata, A.M. 9197.
Shieh, H.S. 8303.
Shiel, R.S. 5640.
Shields, D.S. 6425.
Shields, M.S. 3682.
Shiga, S. 3251.
Shiga, T. 597.
Shiio, I. 1728, 7661, 8527.
Shiio, T. 1439, 3134, 4059, 4061.
Shikher, V.I. 822, 6790.
Shilnikova, I.I. 3456.
Shilnikova, I.I. 857.
Shilova, S.V. 476.
Shima, S. 3411.
Shimada, H. 6863.
Shimada, Y. 1446.
Shimamura, A. 27, 28.
Shimazu, Y. 8696.
Shimoda, K. 506, 5718, 7550.
Shimoda, T. 4929.
Shimura, Y. 99.
Shin, C.-S. 2679, 2680, 4412.
Shin, M. 4280.
Shin, T. 8596.
Shinagawa, E. 4347, 8592.
Shine, J. 9006.
Shingaki, M. 231.
Shingh, S.K. 9107.
Shinji, M. 6838.
Shinkai, K. 2637.
Shinke, R. 2709, 6162.
Shinoda, T. 836.
Shintani, M. 1874.
Shiota, H. 5691, 7546.
Shiota, M. 2615, 8574.
Shiota, T. 4862.
Shioya, S. 5115, 6678.
Shiozaki, S. 7710, 8623.
Shipe, W.F. 4448.
Shipliv, M.A. 5659.
Shiple, P.L. 6425.
Shipton, P.J. 1185.
Shipton, W.A. 4593.
Shipway, M.R. 8055.
Shirai, M. 4876, 9074.
Shirashi, A. 2293, 2585, 3481.
Shiraki, K. 8447.
Shireman, R.B. 2576.
Shiratori, Y. 4296.
Shirkhanova, N.V. 9039.
Shishlevskaya, T.N. 1064.
Shishio, I.I. 8679.
Shivaji, S. 7361.
Shivananda, P.G. 4709.
Shivashankar, G. 8691.
Shively, J.E. 1916.
Shivpuri, A. 2034.
Shkiddchenko, A.N. 6938.
Shneider, M.A. 6485.
Shockey, R.K. 6772, 7604.
Shoda, M. 6080.
Shoeb, A. 9096.
Shoeb, A.A. 2901, 8002.
Shoemaker, P.B. 5456.
Shoemaker, S.P. 3499, 7738.
Shoji, A. 5842.
Shokes, F.M. 7945.
Shomura, T. 2285, 2286, 2295.
Shonard, J. 5854.
Shonard, J.W. 4203.
Shope, R.E. 609.
Shopp, M. 899.
Short, H.B. 735.
Shotts, E.B. Jr. 4816, 9328.
Shottwell, O.L. 1904.
Shotkane, A.P. 2564.
Shraideh, Z. 5954.
Shree, M.P. 2137.
Shreesastri, S. 7791.
Shrivastava, R.C. 2038.
Shrum, R.D. 3894, 7944.
Shulbans, E.E. 6485.
Shudo, K. 7478.
Shukla, A.K. 3875.
Shukla, D.N. 3943.
Shukla, I.K. 6257.
Shukla, P. 1977, 1979.
Shukla, S.K. 7386.
Shukla, U.C. 9224.
Shukla, V.D. 2072.
Shuler, M.L. 1597, 4173, 9294.
Shumate, S.E. 5282.
Shungu, D. 774.
Shungu, D.L. 3047, 6458.
Shuratov, I.K. 7389.
Shusterman, E.A. 8437.
Shute, L.A. 5052.
Shuval, H.I. 3224.
Shved, A.D. 1344.
Shvinka, Yu.E. 4267, 7669.
Shvydas, V.K. 6034, 6822.
Shyley, T.K. 922.
Sicardi, D. Mallorca, M. 8242.
Sicarra, T.G. 8948.
Siddiqui, M.S. 1660.
Siddique Mirza, M. 7965.
Siddiqui, A. 6626.
Siddiqui, M. 587.
Sidhu, G.S. 2864, 4579.
Sidhu, M.S. 186.
Sidoli, L. 6461.
Sidorov, I.A. 4694.
Sidorova, I.L. 9321.
Siedow, R. 5027.
Siebeling, R.J. 1590, 9286.
Sieber, M. 491.
Siebert, K. 6840.
Siegel, J. 7572.
Siegel, M.R. 796, 7979, 8119.
Siegel, M.S. 538.
Siegel, R.S. 9302.
Siegel, S.A. 5743.
Siegmund, L.J. 6643.
Siegist, T.W. 4917.
Siehr, D.J. 5277.
Sieker, C. 6558.
Siekel, H. 738.
Sielecki, A.R. 204.
Siepmann, R. 5597.
Sierota, Z.H. 2116.
Sieverding, E. 2934.
Siegel, J.S. 2213.
Signer, E.R. 7336.
Shih, S.-I. 935.
Siarn, K. 1835.
Sikora, L.J. 5488.
Sikora, R.A. 5411, 5524.
Sikoty, B. 3444, 3504, 3505, 4237, 5874, 6821.
Silev, A.B. 7454.
Siapanuntakul, S. 2658.
Silcox, V.A. 1405, 7342.
Silhol, M. 1559.
Silchenkova, R.K. 5336.
Sills, A.M. 3628, 5193, 6110.
Siman, R.W. 3497, 3602.
Silva, A.R. 5594.
Silva, D.O. 1740, 5818.
Silva, G.H. 2069.
Silva, H.J. 1951.
Silva, J. 2510.
Silva, M.G. 5864.
Silveira Neto, S. 6908.
Silveira-Schrank, I. 7272.
Silvennoinen, E. 5965.
Silver, S. 3026, 3680.
Silverman, G.P. 1363, 6979.
Silverman, M.J. 1795.
Silverstein, J. 1473.
Silva, V. 7014.
Silve, P. 5231.
Sim, I.S. 2228, 4025, 4768.
Simakov, Yu.G. 6706, 7490.
Simakova, I.M. 2589.
Simard, E.E. 5363, 6196, 8715.
Simon, F.A. 5280.
Sim-Las-le Fiohic, A.M. 1527.
Simkins, S. 6944.
Simmonds, N.W. 8892.
Simmonds, R.S. 3219.
Simmons, J.A. 2403.
Simmons, J.R. 3833.
Simmons, N.W. 1176.
Simoen, E. 6631.
Simon, C. 7626, 9188.
Simon, H. 1842, 3448.
Simon, J. 4067.
Simon, J.R. 4748.
Simone, G.W. 3815.
Simoni, D. 9118.
Simons, M.D. 5489.
Simonsen, C.C. 6591, 6616.
Simonsen, L.G. 4140.
Simonyan, A.L. 4300.
Simova, E. 2891, 6056.
Simpson, B.K. 8678.
Simpson, C.N. 9164.
Simpson, D.H. 5004.
Simpson, M.E. 4474.
Simpson, S.J. 8531.
Simpson, T.J. 3421, 7785.
Sims, G.K. 5674.
Sims, R.C. 9253.
Sinclear, L.L. 9224.
Sinclear, M.J. 9013.
Sinclear, N.A. 6714, 6418.
Sinclear, T.R. 7233.
Sindera, W.A. 349.
Sindeeva, L.A. 4434.
Singer, J.T. 8278.
Singer, M.E. 3004, 8280.
Singh, A. 4034.
Singh, A.K. 6223.
Singh, A.P. 9298.
Singh, B.B. 8898.
Singh, B.M. 7929.
Singh, C. 92.
Singh, C.P. 6343.
Singh, D.P. 8391.
Singh, D.S. 1214.
Singh, D.V. 1183, 3808, 7984, 8798.
Singh, G. 5421.
Singh, H. 3042.
Singh, H.B. 245, 8107.
Singh, J. 4453, 6989, 8837.
Singh, J. P. 2029.
Singh, J.B. 9298.
Singh, J.P. 2776.
Singh, K. 1417, 3114, 3131, 4684, 8127, 8851.
Singh, K.B. 3787, 3863, 3865, 4247, 8093.
Singh, K.P. 3256.
Singh, L. 7252.
Singh, M. 2706, 8343.
Singh, N. 3887, 8023.
Singh, N. 1071, 6283.
Singh, O.S. 7251.
Singh, P. 2919.
Singh, P.D. 1448, 6805.
Singh, P.J. 1975, 1976, 1980.
Singh, P. 3964.
Singh, P.N. 1977.
Singh, R. 7505, 7873, 8138, 8395, 8800.
Singh, R.A. 2787.
Singh, R.B. 5412.
Singh, R.C. 8143.
Singh, R.K. 8877.
Singh, R.N. 8917.
Singh, R.P. 6315, 7252, 8017, 8127, 8836, 8849.
Singh, R.R. 1979, 4511.
Singh, R.S. 2033, 7693, 8088, 8878.
Singh, S. 186, 4453.
Singh, S.D. 8137.
Singh, S.J. 360, 2036, 2107, 8774, 8715.
Singh, S.K. 9202.
Singh, S.N. 289, 4952.
Singh, S.P. 1615, 7386.
Singh, S.R. 8898.
Singh, T.H. 8059.
Singh, U.P. 245, 5412, 8107.
Singh, V. 2787.
Singh, V.P. 2836.
Singh, V.S. 6317.
Singhro, R.S. 2029.
Singleton, F. 1944.
Singleton, F.L. 5849, 6711.
Singleton, P.W. 2163.
Sinha, A.K. 2077, 3887, 7201.
Sinha, A.P. 8930.
Sinha, P.R. 1612.
Sinha, R.C. 7141.
Sinha, R.K. 3880.
Sinha, R.N. 1082, 1612.
Sinha, R.P. 5708.
Sintyn, A.P. 3683, 4441, 6040, 7736.
Sinskey, A.J. 3419.
Sinyakov, M.S. 8435.
Sippel, C.J. 7599.
Sippel, J.E. 667.
Siqueira, J.O. 5629.
Siqueira, P.S. 4485.
Siqueira, R. 5931.
Sirachana, B.S. 8838.
Siragi, P. 5715.
Sireno, I. 2121.
Siranni, P. 909.
Sirois, J.C. 2960.
Siroi, D. 4052.
Siroi, J. 4052, 7403.
Sisler, H.D. 2092.
Sitalarama Raju, K. 2037.
Siti, E. 1209.
Sitova, M. 6128.
Sivan, A. 4589.
Sivannandan, V. 6751.
SivaRaman, H. 8658.
Sivasathamparan, K. 2020, 3775, 8986.
Sivasubramanian, N. 6598.
Snodgrass, E.F. 9101.
Sjoberg, B.-M. 7666.
Speetoom, J.E. 3642.
Skachova, H. 5999.
Skalka, B. 695, 3314, 4883.
Skalka, M. 8763.
Skarzynska, M. 1912.
Skaug, N. 7545.
Skeels, J.K. 3245, 5074.
Skendzel, L.P. 4978.
Skiba, U. 8968.
Skidmore, D.I. 8034.
Skidmore, S.J. 4156.
Skinner, R.A. 4246.
Skipp, R.A. 8307, 8781.
Skinner, H. 8204.
Skizar, B. 2076.
Sklyankina, V.A. 3434.
Sklyar, J. 4651.
Skorobogatko, O.V. 922.
Skotland, C.B. 1170.
Skotnicki, J.S. 1426.
Skotnicki, M.L. 2694, 4415, 6109, 7795.
Skow, J.P. 5201.
Skow, J. 5570.
Skripal, I.G. 923.
Skripchenko, L.N. 7301.
Skripkin, A.E. 2319.
Skryabin, G.K. 104, 4683.
Skryabin, J. 4651.
Skulachev, V.P. 2589.
Skura, B.J. 7849.
Skurda, G.I. 8512.
Skurda, R.A. 4422, 9178.
Skylakakis, G. 4496.
Skylak, R. 6468.
Slack, S.A. 8649.
Slade, W.R. 6635.
Slaney, L.A. 3027.
Slater, C.S. 4084.
Slater, G.P. 2684.
Slater, J.H. 1974, 5092, 7337.
Slater, J.C. 2861.
Slaughter, J.C. 3626, 7810.
Slavikova, N. 3600.
Sletten, R.S. 2375.
Slevin, N.J. 9087.
Slikin, M. 1669, 2495, 3321.
Slim, A. 1863.
Sliva, C.A. 3106.
Sliwowski, M.K. 8588.
Sloomans, L. 6780.
Slots, J. 710, 1617.
Slovova, A. 6985.
Slusarchyk, D.S. 5959.
Slusarenko, A.J. 2785.
Slutsky, V.I. 6440.
Sly, L.I. 4188.
Smalley, B.B. 8186.
Smallwood, B. 3309.
Smallwood, L.A. 6618.
Smearon, C. 2488.
Smekal, F. 866, 3405, 7670.
Smeltzer, S.M. 4204.
Smiley, R.W. 1688, 5418.
Smirnoff, W.A. 2667, 3544.
Smirnov, O.P. 4900.
Smirnov, V.D. 2319.
Smirnov, V.N. 5080, 7669.
Smirnov, V.V. 7313.
Smit, A.C.W. 4004.
Smith, A.D. 1305.
Smith, A.C. 247.
Smith, A.I. 4993.
Smith, A.S. 590, 590, 5780, 7338, 7588.
Smith, A.M. 766.
Smith, A.R. 7543.
Smith, B.E. 2612, 3413, 5141.
Smith, B.H. 396.
Smith, B.P. 5811.
Smith, C.J. 1274.
Smith, D. 1472, 2526.

Author Index

- Smith, D.A. 1749.
Smith, D.R. 8861.
Smith, D.W. 4656, 8935.
Smith, E. 9281.
Smith, E.M. 4897, 7526, 8120.
Smith, F. 7417.
Smith, F.D. 8925.
Smith, G.A. 5817, 8202.
Smith, G.C. 5362.
Smith, G.L. 4887, 6596, 6638.
Smith, G.M. 1244.
Smith, H. 1541.
Smith, H.A. 458, 8311, 8452.
Smith, J.C. 8095.
Smith, H.R. 1935.
Smith, I.D. 5041.
Smith, I.M. 5912.
Smith, I.W. 5584.
Smith, J.A. 498, 750, 1626.
Smith, J.E. 7102, 7649.
Smith, J.F. 1680.
Smith, J.L. 3165, 5562, 7269, 7913.
Smith, J.S. 6782.
Smith, J.T. 9053.
Smith, K.L. 2578.
Smith, K.M. 9315.
Smith, K.O. 4013, 4032.
Smith, L. 1629.
Smith, R.L. 1943, 1944.
Smith, R.L. 2367.
Smith, L.W. 3735.
Smith, M.A. 1193, 4666, 7271.
Smith, M.C. 4761.
Smith, M.D. 5004, 5615.
Smith, M.G. 4931.
Smith, P.A. 2749.
Smith, P.B. 686.
Smith, P.F. 3226, 5859.
Smith, P.G. 9239.
Smith, R.D. 3491.
Smith, R.F. 2432.
Smith, R.L. 8982.
Smith, R.J. 3998.
Smith, R.L. 1275, 5661.
Smith, R.N. 1252, 1298.
Smith, R.P. 4801, 9030.
Smith, R.S. 1248.
Smith, R.V. 7117, 9439.
Smith, S.E. 3382, 3933, 7579.
Smith, S.M. 445.
Smith, T.F. 1566, 3337, 5037, 8437.
Smith, V.L. 7918.
Smith, W.H. 6948.
Smith, W.J. 2.
Smith, W.K. 6342.
Smithson, J.B. 298.
Smithson, J.B.S. 3867.
Smits, T.A. 2639.
Smiley, D.A. 279.
Smola, J. 695, 3314.
Smolanić, V.V. 1741.
Smr, J. 4760.
Smucker, R.A. 1301.
Smutko, A.N. 947.
Smysler, S. 5836.
Snajdar, J. 8128.
Snead, M.C. 4938.
Sneh, B. 129, 131, 3563, 3564, 8115, 8227.
Snetsinger, R.J. 6278.
Snezhova, L.P. 493.
Sniezek, Z. 2559.
Snippe, H. 542.
Snitzer, J.B. 789.
Snodgrass, D.R. 2446.
Snow, G.A. 4615, 8187, 9174.
Snow, J.P. 5453.
Snow, J. 2681.
Snowden, S.E. 7198.
Snyder, D.B. 5017.
Snyder, J.P. 8756.
Snyder, M.J. 2471.
Snyder, O.P. 6965.
Snygg, B.G. 7357.
Soares, G.G.Jr. 2650.
Sobachkina, I.S. 2276, 2277.
Sobczak, E. 2742.
Sobkowska, E. 7856.
Sobolev, V.A. 1079.
Sobolev, V.R. 4442.
Sobotka, M. 6679, 9235.
Sobotkova, E. 641.
Sobsey, M.D. 2387, 5853.
Soby, S. 378.
Sobzack, E. 6930.
Socransky, S. 2423.
Socransky, S.S. 5753.
Soda, K. 17, 65, 140, 4311, 5149, 5511, 6846, 8486, 8517, 8524.
Sodzwaczyni, K. 6065.
Soederlund, G. 450.
Soederlund, H. 9313.
Soederstrom, B. 1231, 2931, 8489.
Soegaard, P. 6416.
Soeishi, K. 8593.
Soerensen, L.H. 2935, 2938.
Soergel, M.E. 1574.
Soerheim, O. 5334.
Soerjadi-Liem, A.S. 6194.
Sofos, J.N. 7024.
Sogura, M. 5971.
Sohi, H.S. 1181, 2032.
Sohle, P.G. 3222.
Sohler, R.D. 7455.
Soikkeli, S. 6325.
Sojka, S.A. 4920, 8399.
Sokatch, F.R. 6831.
Sokolov, S.S. 2036, 8774.
Sokolov, D.P. 1679.
Sokolova, E.A. 1679.
Sokolova, E.I. 4396.
Sokolovskii, V.D. 1768.
Sokolowski, S.W. 6399.
Solanki, R.B. 2086.
Solano, W. 3343.
Solari, A.J. 5337.
Solberg, C.O. 7450.
Solberg, M. 3747.
Solomon, G. 5062.
Solomon, K. 4103.
Solra, Z. 5932.
Solter, J. 2620, 3454.
Solheim, H. 8173.
Solinas, M.A. 197.
Solomon, M. 8472.
Soliday, J. 4808.
Solins, P. 7290.
Solomko, E.F. 5336.
Solomon, B.O. 798, 800.
Solomon, W.R. 803.
Solomons, G.L. 2752.
Solomonson, L.P. 8554.
Solov'eva, T.A. 4358.
Soltesz, V. 4828.
Soltau, K. 2912.
Somashakar, R.K. 8821.
Somerson, N.L. 8893.
Somerville, R.L. 3371.
Someya, Y. 6851.
Somma, S. 9190, 9204.
Sommers, H.M. 6455, 6527.
Somers, L.E. 8961.
Somerville, J.S. 447.
Somsuk, P. 33.
Somville, M. 3338.
Son, H.J. 2248.
Sonar, K.R. 7277.
Sone, N. 7755.
Sone, P.C.W. 1941.
Sonehara, T. 3697.
Song, G. 7564.
Song, Y.-Z. 1907.
Song, Z.-Y. 7451.
Sonleitner, B. 546.
Sonnenwirth, A.C. 635, 696, 1569.
Sonleitner, B. 8654.
Son, M. 1773.
Sonobe, T. 1352.
Sonoda, A. 3181.
Sonomoto, K. 87, 105.
Soostmeyer, G. 6621.
Soper, T.S. 7717.
Soracco, R.J. 5851.
Soranzo, M.L. 6508, 6509, 6526.
Sorensen, L.H. 7191.
Sorgor, H. 4296.
Soriano, F. 7318, 9182.
Sorlini, C. 2720, 4134.
Sornchai, C. 777.
Sorolla, A.G. 8329.
Soro, M. 275.
Sorrell, M. 3634.
Sottil, T. M.A. 8884.
Sotayama, H. 9084.
Soucaille, P. 6008.
Soucy, K. 2330.
Soulez, P. 8923.
Souza, C.J. 6541.
Southern, J.A. 3143.
Southern, P.M. 7424.
Southern, P.M.Jr. 7577, 7594.
Southern, S.J.P. 8453.
Southgate, R. 1335.
Souza, L. 8661.
Souvra, D. 2406, 6708.
Sowadski, J.M. 2587.
Sowalski, L.L. 888.
Sowell, G.Jr. 8903.
Spacak, B. 3600.
Spagna, V.A. 671, 3276.
Spagnoli, R. 1402.
Spagnolo, N. 6501.
Spang, H.J. 9230.
Sparks, D. 3814.
Sparks, K. 780.
Sparks, R.B. 3539.
Sparrling, P.G. 373, 5631.
Sparrling, P.F. 5761.
Sparr, J. 6623.
Sparrow, J.T. 6609.
Sparrow, S.D. 406.
Spassov, A.L. 2219.
Spassovska, N. 2219.
Speakman, J.B. 5512, 7952.
Spear, S.R. 1335, 3155.
Spearman, G.A. 8062.
Spechia, V. 6677.
Speck, R.V. 4207.
Speck, W.T. 5732, 5767, 5942.
Spector, T. 902.
Spedding, G. 6432.
Speece, R.E. 1483, 2376.
Speedie, M.K. 5795.
Speight, T.M. 536.
Speer, T.W. 8225.
Speller, D.C.E. 2507.
Sperry, M.W. 7836.
Spencer-Martins, I. 2586, 4331.
Spencer, D.M. 1218.
Spencer, R.C. 6401, 6555, 9191.
Spencer, S.G. 3485.
Spencer, W.N. 4206.
Spentley, P.J. 5305.
Speth, J.L. 1426.
Spetoli, P. 8600.
Spezia, C. 6509, 6526.
Spicher, G. 5326.
Spiegelberg, F. 3491.
Spier, R.E. 656, 5806.
Spiers, A.G. 357, 365, 2112, 2113, 5596.
Spies, H.S.C. 122.
Spigarelli, S.A. 7645.
Spika, J.S. 1662.
Spindler, D. 4402, 7806.
Spinelli, J.C. 681.
Spino, M. 500.
Spira, W.M. 8750.
Spire, B. 5983.
Spivak, N.Ya. 1344.
Spivak, J. 4327.
Spoerssler, B.G. 80.
Spohn, M. 3048.
Spokes, J. 4581.
Sporkenbach-Hoeffler, J. 470.
Sporn, T. 9136.
Spotts, R.A. 2804, 7985.
Spren, J.J. 2980.
Sprey, B. 1751, 8572.
Spriggs, D.R. 6627.
Springer, J.P. 1954, 6562, 8755.
Springer, W.T. 5001.
Springthorpe, V.S. 2232, 4955, 7538.
Sprouss, M. 464.
Sproussier, B. 5830.
Spry, D.O. 6520.
Spurr, H.W.Jr. 4550, 8136.
Psycher, G. 7290.
Squire, K.R.E. 4148.
Sramkova, L. 641.
Sreenath, H.K. 3470, 8538, 8598.
Sridhar, P. 8305.
Srin, F. 662, 1572, 3403, 9295.
Srinantha, T. 8483.
Srinanarayana, G. 8305.
Srinivasan, G.P. 6689.
Srinivasan, M.C. 91, 919, 3484, 7742.
Srinivasan, R. 7718.
Srinivasan, R.A. 7788.
Srinivasan, R.N. 6212.
Srivastava, A.K. 7799.
Srivastava, A.K. 2097, 6123, 8602.
Srivastava, D.S. 1214.
Srivastava, G.P. 92.
Srivastava, G.D. 1183, 3808, 7961.
Srivastava, N. 9136.
Srivastava, O.P. 4016.
Srivastava, R.A.K. 7705.
Srivastava, R.B. 2836.
Srivastava, R.N. 8142, 8829.
Srivastava, R.S. 4511.
Srivastava, R.V.N. 7873.
Srivastava, S.K. 289, 6257, 8602.
Srivastava, S.N. 8851.
Srivastava, V.J. 4106, 4907, 5831.
Ssali, H. 7286.
St. Clair, M.H. 4029.
St. James, L.H. 448.
St. John, T.V. 1254, 8215.
St. Johns, T.V. 5576.
St-Pierre, C.-A. 8072.
Staab, K.F. 9230.
Staalhandske, P. 608, 4979.
Stacey, G. 8590.
Staccioli, G. 7244.
Stace-Smith, R. 6256.
Stacey, G. 6377, 7275.
Stachulski, A.V. 4867.
Stachyra, A. 1894.
Stack, R.J. 5117.
Stack, R.W. 3950.
Stadelman, W.J. 2462.
Staebler, H. 4993.
Stafford, D.A. 420, 4437, 8390.
Stafford, S. 4437.
Stager, C.E. 2447.
Stahl, J.C. 1338.
Stahl, P.D. 6242.
Stahl, T. 596.
Stahl, U. 9876.
Stahly, T.S. 1317, 2197, 3033, 5711, 8295.
Stahr, M.H. 4019.
Stahl, F. 580.
Stal, L.H. 9318.
Stalder, G.A. 5921.
Stalder, H. 5921.
Stalder, R. 8607.
Stalheim, O.H.V. 6756.
Stall, R.E. 4546, 4561.
Stalling, F.H. 3352.
Stalpers, J.A. 3845.
Stalpers, J.R. 5330.
Stamm, A.M. 6544.
Stamm, B. 7399.
Stamps, R.H. 7728.
Stampweile, S.J. 2639.
Stanbury, P.F. 5096.
Stancovic, A. 8080.
Standard, P.G. 810.
Standford, H.C. 9186.
Standridge, J.H. 564.
Stanek, E. 5524.
Stanek, G. 6523.
Stanek, J. 8526.
Stanek, M. 2891, 6309.
Stanek, Ya.Ya. 5928.
Staneloni, R.J. 8886.
Stankovic, E. 8302.
Stankiewicz, M. 2139.
Stankova-Shindorova, I. 8302.
Stankovic, D. 8080.
Stanley, J. 6365.
Stanley, S.H. 3037.
Stanley, J. 4327.
Stanton, G.J. 632, 2227.
Stanton, R. 8700.
Stanway, G. 6624.
Staphoskensk, E.S. 6880.
Staples, R.C. 250.
Stapleton, J.J. 4618.
Stapley, E. 774.
Stapley, E.O. 8991.
Stapper, M.F. 8009.
Stark, D.M. 5021.
Stark, R. 7036.
Stark, R.W. 8182.
Starkey, T.E. 4527.
Starodub, M.E. 412.
Starosciak, B.J. 4328.
Starostina, N.G. 1614, 4971.
Starr, S. 4072.
Starr, S.E. 2747.
Starzyk, J. 9201.
Stashkevich, N.P. 4764.
Stassen, A.M. 1703.
Stasna, J. 3292.
States, J.J. 1327.
Stauder, G. 3477.
Staudt, G. 5736.
Stavely, J.R. 2846, 3857, 8103.
Stavskaya, S.S. 4343, 6030, 6952.
Stead, D. 21.
Stead, E.E. 3385.
Steadman, R.A. 7737.
Stebbins, R.L. 8218.
Steele, K.W. 2948.
Steen, E. 376.
Steen, W.C. 1882.
Stefanova, A.L. 1823.
Stefanov, B.F. 2854.
Steffens, G.C.M. 897.
Steffenson, B.J. 265, 8073.
Steghuys, F. 2688.
Steigbigel, N.H. 4729, 9075.
Stein, D.C. 7477.
Steinberg, M.P. 4108, 5290.
Stein, S.P. 1566.
Steindler, K.A. 1378.
Steiner, A.M. 7136.
Steiner, B. 6457.
Steiner, H. 4732.
Steinfeld, A. 8311.
Steinfeld, A.S. 458.
Steinkraus, K.H. 211, 3692.
Steinman, C.E. 2639.
Stelakova, E. 3504.
Stellmach, J. 4374.
Stein, H.E. 3956.
Steitzer, W. 3218.
Stelmek, A. 9124.
Stelzne, G.W. 659, 733.
Stemmler, J. 6711.
Stender, J.O. 4135.
Stenroos, A.S. 7411.
Stenroos, S. 4993.
Stensel, H.D. 3190.
Stenstrom, I.-M. 7002.
Stenz, E. 3970.
Stepanov, V.M. 2584, 5136, 5153, 6608.
Stepanova, L.S. 4317.
Stepanova, V. 3252.
Stephan, R. 4179.
Stephan, W. 6652.
Stephanopoulos, G. 175, 588, 1696, 6199.
Stephen, F.M. 6892.
Stephens, C.T. 3831.
Stephens, L.R. 4895.
Stephens, P.J. 2607.
Stephens, R.S. 2455.
Stephenson, J.T. 3408.
Stermer, B.A. 7233.
Stern, H. 2438.
Stern, K.F. 6543.
Stern, P.J. 6524.
Sternbach, H. 930.
Sterritt, R.M. 1430, 3196.
5679, 9227, 9233.
Stettler, R. 2933.
Stettler, R.E. 3026, 8425.
Stevens, D.A. 2535, 3086, 5733.
Stevens, L. 1166.
Stevens, P. 5219.
Stevens, T.H. 5180.
Stevenson, K.E. 8414.
Stevenson, K.J. 3522.
Stevenson, M. 513, 4849.
Stavis, P. 983, 5157.
Stewart, A.L. 1878.
Stewart, C.M. 4035.
Stewart, G.G. 3628, 4407, 5193, 5803, 6107, 7801.
Stewart, J.C. 1807.
Stewart, J.W.B. 4626.
Stewart, P.R. 6436.
Steyn, P. 3744, 4469, 4470, 4471, 5256, 5578.
Stibbe, W. 6653.
Stibrany, L. 6488.
Sticht-Groh, V. 4750.
Stickler, D.J. 2408, 4936, 9220.
Stigalo, I.N. 5928.
Stiles, J.J. 819.
Stille, W. 4798.
Stillman, S.L. 3874.
Stinbuechel, A. 150.
Sturner, T.L. 4124, 7518.
Stirling, T.E. 5875.
Stirling, G.R. 1853.
Stirling, J.L. 5242, 5243, 6099, 6101.
Stobbering, E.E. 525, 3092.
Stobbs, L.W. 4535, 9273.
Stoer, R.A. 2747.
Stocker, U.V. 5289.
Stocker, B.A.D. 5811.
Stoeklein, W. 875.
Stockman, L. 814, 4159.
Stockwell, V. 1174.
Stoer, E. 5999.
Stoess, P. 1207.
Stoessl, A. 2813, 3576.
Stoessl, L.L. 2534.
Stokes, G.V. 5068.
Stoklasova, J. 4216.
Stoler, B.S. 581.
Stoloff, L. 7049, 7065, 8727, 8729, 8732.
Stolp, H. 8237.
Stollenberg, J. 2903.
Stone, L.L. 1383.
Stone, S.S. 6756.
Stoppok, E. 2592.
Storey, C.L. 8056.
Storey, G.K. 6091.
Storm, C.B. 5986.
Storrs, B. 4805.
Storv, J.D. 3245.
Storv, J.D. 3576.
Stotler, R.W. 2207.
Stott, J.L. 9230.
Stolz, G. 3240.
Stotzyk, G. 2939, 2940, 4624.
Stouffer, R.F. 3818.
Stougaard, B. 8904.
Stout, J. 6160, 7528.
Stout, J.D. 7268.
Stover, E.L. 1469, 1480, 1486, 4916, 6680.
Stover, G.B. 11.
Stover, L.H. 8064.
Stowers, M.D. 2155, 5664.
Strachan, S.D. 8961.
Straley, M.L. 2820.
Stramer, S.L. 9243.
Strand, C.L. 1604, 5908.
Strand, S.E. 2717.
Strand, S.H. 7582.
Strandberg, J.O. 1226.

- Sugarc, R.N. 4492, 8092.
Stranger-Johannessen, M. 1038.
Strannegaard, Oe. 4773.
Strassburger, J. 8345.
Strate, R.G. 3116.
Stratowa, C. 6597.
Stratton, C.W. 666.
Stratton, G.W. 459, 2174.
Straub, R.W. 5495.
Strauch, D. 2365.
Strauss, S.E. 8452.
Strauss, H. 3331.
Strauss, W.M. 9257.
Strawman, V. 8443.
Street, J.L. 6730.
Street, G. 2627.
Street, J.E. 6643.
Street, P.F.S. 7207.
Streeter, J.G. 6385.
Strehaano, P. 3614.
Strick, T. 2681.
Stribley, D.P. 3934, 5623.
Stribley, M.F. 5401.
Strick, J.E. 1230.
Strick, N. 646, 6617, 6747.
Strickland, T.C. 5617.
Stridjord, B.W. 6382.
Strim, T. 2681.
Strobe, R. 6736.
Strobel, G.A. 1936, 1954.
Strobel, I. 4793.
Stroem, G.B. 8489.
Stroem, T. 3326.
Strohl, W. 5350.
Strom, C.A. 4982.
Strover, R. 865, 3409.
Strouffer, F.R. 8811.
Strub, W. 1700.
Strunz, G.M. 354, 3926.
Struzinsky, R. 5716.
Strzask, A. 7589.
Strzeczny, E. 9161.
Stuart, F.A. 5063.
Stuart, J. 1941.
Stuart, M.R. 5392.
Stubbe, J. 8556.
Stuckey, R.E. 8778.
Stucki, G. 1020.
Stuetz, A. 8320.
Stuker, E. 693.
Stull, J.W. 2743.
Stull, T.L. 7338.
Stults, L.W. 6826.
Stults, N.L. 2580.
Stumm, D. 7988.
Sturdiv, E. 6498.
Sturgeon, R.J. 837.
Stute, R. 6748.
Stutter, E. 956.
Stutz, J.C. 1116.
Stutz, M.W. 1065.
Stutzenberger, F. 1746.
Stutzman, J.F. 1575.
Styer, R.C. 3804.
Styer, W.E. 7960.
Styllianidis, D.C. 335.
Stylianides, B.A. 3807, 6215.
Su, C.-S. 8613.
Su, H.-J. 3768.
Su, T. 6482.
Suarez, P. 2509.
Suarez Fernandez, G. 4951.
Suarez, J.A. 3693.
Suetegui, J. 6841.
Suau, E. 1921.
Subba-Rao, R.V. 6945.
Subbarao, G.V. 5427.
Subbarayudu, S.S. 4504.
Subden, R.E. 3627.
Subetz, S. 8996.
Subramanyam, T.P. 4955.
Subramanian, A.R. 4258.
Subramanian, M. 9194.
Subramanian, S. 4783.
Subramanian, V. 8278.
Subramanya, R. 8909.
Subudhi, B.P.R. 3964.
Sub, V.K. 7929.
Suffert, I.H. 6672, 7496, 7646.
Sufita, J.M. 2701, 6180.
Sugai, A.G. 8325.
Suganti, I. 7865.
Sugatt, R.H. 3660.
Sugawara, M. 6067.
Sugawara, S. 1393, 4820.
Sugawara, T. 511, 1438.
Sugden, D.A. 6217, 7802.
Sugie, K. 6846.
Sugimori, T. 2580.
Sugimoto, I. 1895.
Sugimoto, S.-I. 8527.
Sugimoto, T. 941, 1785.
Suginaka, H. 1393, 2556.
Sugio, T. 9030.
Sugiyama, A. 436.
Sugiyama, K. 3251.
Sugiyama, T. 1301, 1632, 4847, 4848.
Sugiyama, T. 1953.
Suh, M.H. 6438.
Suhag, L.S. 2029, 2776, 8016, 8830.
Suhara, Y. 1445, 1447.
Suhaw, S. 7153.
Suidan, M.T. 568.
Suihiko, M.-L. 1860, 3643, 6107, 9344.
Suiter, W.C. 693.
Sukharevich, V.I. 5928.
Sukhnova, G.M. 7398.
Sukuiwan, M. 6970.
Sukumar, G.R. 5867.
Sula, J. 2646.
Sullia, S.B. 7248.
Sullivan, D. 7237.
Sullivan, N.M. 1641.
Sullivan, T.P. 7237.
Sullivan, I.G. 6872.
Sumathi, D. 5124.
Sumbali, G. 2031, 2053.
Summerfield, R.J. 6376.
Summers, R.S. 7502.
Summers, W.L. 2828, 2829.
Sumner, D.R. 1111, 1148.
Sun, J.-E. 3768.
Sun, J.-S. 1163.
Sun, M.S. 1565.
Sun, W. 506.
Sun, Y.-R. 7907.
Sundaram, B.M. 4783.
Sundaram, K.S. 7472.
Sundaram, Sp. 6480.
Sunderland, K.D. 5233.
Sundman, V. 4651.
Sundquist, B. 6620.
Sundström, M. 7089.
Sunström, J.C. 9114.
Sunter, G. 6279.
Suominen, M. 140.
Suoriti, T. 7904.
Suozzo, R. 1471.
Supharungsun, S. 7258.
Supran, E.M. 2441, 4156.
Suprun, S.M. 860.
Surocu, E. 1727.
Sureau, C. 6607.
Sureau, P. 6660.
Surgot, M. 4789.
Surgucheva, N.A. 7915.
Suri, P.N. 6424.
Suri, R.A. 8028.
Suri, G. 4558.
Surovtseva, E.G. 6947.
Surprenant, J. 8087.
Surbajali, O.P. 4186.
Suryanarayana, T. 4258.
Susela, T. 204.
Sutcliffe, J.G. 6632.
Sutherland, E.D. 805.
Sutherland, I.W. 1828, 3528, 4367, 5060.
Sutherland, J.B. 2890, 6164.
Sutherland, J.P. 3708.
Sutherland, J.R. 7237.
Sutherland, S.S. 1582.
Sutter, R.P. 6064.
Sutter, V.L. 1329.
Sutton, A. 2323.
Sutton, B.C.S. 6365.
Sutton, J.C. 1110.
Sutton, K. 1604.
Suurova, E.E. 4358.
Suuronen, P. 196.
Suyamadana, P. 3610.
Suzaki, A. 7000, 7774, 9207, 9217.
Suzuki, H. 768, 3233, 3538.
Suzuki, I. 6891.
Suzuki, K. 4286, 5105.
Suzuki, K.T. 5245.
Suzuki, M. 12, 3144, 3145, 5896.
Suzuki, N. 4876.
Suzuki, S. 416, 767, 768, 1430, 1468, 1578, 1605, 3530, 3577.
Suzuki, T. 1424, 1745, 2710, 3148, 3734, 6163, 8604.
Suzuki, Y. 103, 1447, 1952, 1955, 6838, 9132.
Suzzi, G. 5268, 6200.
Svanberg, L. 6729.
Svastova, A. 2503.
Svec, F. 778.
Svedas, V.K. 1769.
Svedia, F. 9096.
Sveinjar, M. 2566.
Svendsen, A.M. 5730.
Svendsen, I. 5980, 7724.
Svenson, S.B. 2322.
Svensson, B. 5980, 7724, 7726.
Svensson, B.H. 8264.
Svensson, L. 2236.
Svircev, A.M. 5522.
Sviridov, A.F. 6815.
Svyadishch, I.F. 6866.
Svyato, I.E. 3434.
Swaisgood, H.E. 4283, 5146.
Swami, M.B. 5800.
Swaminathan, B. 2462.
Swaminathan, M.S. 318.
Swaminathan, T. 4093.
Swank, W.T. 4611, 5617.
Swann, R.A. 1498.
Swanson, S.P. 5365.
Swart, P.K. 8205.
Swartz, D.T. 2327.
Swartz, J.R. 5966.
Swartz, M.D. 5787.
Swartz, M.N. 5797.
Swartzell, C.T. 604.
Swarup, G. 8803.
Swayze, J.K. 2247.
Sweeney, A.W. 126, 2653, 2664.
Sweeney, G.D. 2573.
Sweet, R.L. 1865.
Sweiha, H.E. 7168.
Swenson, J.M. 436, 1329, 1405, 4791, 7342, 7447.
Swenson, W. 3153.
Swetetz, V. 7175.
Swin, J.J. 352, 4625, 7224.
Swingler, G.R. 3710.
Swings, J. 4531, 4447.
Swinarski, S. 6165.
Swinzenbaum, M.S. 4104, 4904, 6685.
Syed, S.A. 9310.
Sykes, R.B. 1448, 1450, 6564, 9063.
Sykora, M. 4216.
Sylvester-Bradley, R. 2158.
Sylvester, E.S. 3822.
Sylvestre, M. 5304.
Sylvia, D.M. 2134, 5562.
Symons, J. 7381.
Synat, R. 2303.
Syntash, A.P. 4355.
Syriopoulou, V. 428.
Syschenko, S.I. 924, 5975.
Sytnik, I.A. 4042.
Syuto, B. 6213.
Syvertsen, J.P. 8216.
Syvato, G. 3141.
Szabo, L. 7124.
Szalai, Z. 2245.

Author Index

- Taylor, E.C. 7458.
 Taylor, F. 7528.
 Taylor, G.S. 2062, 5721.
 Taylor, I.W.F. 950.
 Taylor, J.D. 5481.
 Taylor, J.L. 8323, 9110.
 Taylor, J.W. 9330.
 Taylor, P.A. 178.
 Taylor, P.B. 7452.
 Taylor, P.V. 7701, 8520.
 Taylor, R.H. 8859.
 Taylor, V.E. 5891.
 Teal, J.L. 7908.
 Tazaki, H. 5757.
 Tazawa, H. 5757.
 Tazuke, S. 7551.
 Tchan, Y.T. 1601.
 Teakle, D.S. 3610.
 Tealdo, E. 6876.
 Teare, I.D. 7945.
 Tebbett, I.R. 1950, 3741, 8734.
 Tebbutt, D.M. 2487.
 Tedder, D.W. 7808.
 Tedders, W.L. 5263.
 Teddlin, S.D. 2618.
 Teetor-Barsch, G.H. 5215.
 Tegtmeyer, H. 8466.
 Teh, C.-Z. 855.
 Teilhard de Chardin, O. 1716.
 Teissier du Cros, E. 8160.
 Teich, M. 4740.
 Tekido, F. 3454.
 Tekamp-Olson, P. 6628.
 Tekeliev, R. 2459.
 Tekrony, D.M. 8778.
 Tel, W.G. 2235.
 Telenson, M.J. 706.
 Tell, J.C. 9099.
 Telliez-Inon, M.T. 7753.
 Telles, B. 2336.
 Temeyer, K.B. 5209.
 Temme, J. 235, 4534, 8955.
 Templeton, G.E. 3889, 8029.
 Temprano, F. 334.
 Tena, M. 9026.
 Tenhoff, V. 273.
 Teng, P.S. 236, 1093, 6220.
 Tengroby, R.P. 3726, 5310.
 Tengi, F. 6532.
 Tennant, A.D. 6709.
 Tenney, J.H. 702, 2466, 2514.
 Tenorio, J. 5590.
 Tenopenny, J.R. 9258.
 Teo, B.K. 8560.
 Tepper, C.S. 8767.
 Ter-Sarkisyan, E.M. 7455.
 Terahara, A. 519.
 Terakado, N. 4695, 5718.
 Terashima, Y. 6619.
 Teranishi, H. 2896.
 Teranishi, T. 6057.
 Terashima, H. 1735.
 Terayama, T. 231.
 Terokhova, E.Ya. 1322.
 Teroshina, L.P. 4060.
 Terentyeva, T.G. 4058.
 Terplan, G. 1086.
 Terpsitra, C. 6743.
 Terrell, S. 7806.
 Terrell, S.L. 8668.
 Terrell, R. 5049.
 Terry, G.M. 8446.
 Teruel, D. 4746.
 Terui, G. 121.
 Terui, Y. 5493.
 Teshiba, S. 7765.
 Teshima, T. 3160.
 Tesoro, A.M. 500.
 Testa, J. 7676.
 TeStake, D. 7380.
 Teuber, M. 1717.
 Tewari, P. 6257.
 Tesler, O. 5222.
 Textor, J.A. 495.
 Thabet, F.M. 8229, 8990.
 Thacker, L.G. 720.
 Thacker, W.L. 3301.
 Thacker, M.S. 3944.
 Thackur, R.N. 13.
 Thakur, R.P. 1990, 3829.
 Thakurta, B.G. 3529.
 Thaller, V. 5253.
 Thalmann, A. 5471.
 Thammaung, A. 1289.
 Thann, N.C. 1472.
 Thanontpong, P. 317.
 Thaplayai, P.N. 8930.
 Thaveechai, N. 287.
 Thayanithy, K. 3230, 8509.
 Thayer, D.W. 6714.
 Thayer, W.V. 5296.
 Thebtaranonth, J. 8563.
 Then, R.L. 1399.
 Theodorou, C. 7221.
 Theriault, R.J. 2247.
 Theron, M. 7465.
 Thenen, R. 6675.
 Theron, J.M. 7219.
 Therrond, G. 5868.
 Thesavagayam, E.S. 1854.
 Thevenot, D.R. 1454.
 Thiagalingham, K. 6286.
 Thibault, M. 4226.
 Thibodeau, G.A. 777.
 Thibodeau, L. 6650, 6660.
 Thiel, K.D. 464.
 Thiel, P.G. 122, 5256.
 Thierbach, G. 2231.
 Thierry, J.C. 6214.
 Thierney, A. 3433, 4271.
 Thies, W.G. 3923.
 Thiessen, G.P. 7020.
 Thind, B.S. 8929.
 Thind, T.S. 2085, 5525.
 Thinstad, F. 6664.
 Thirkell, D. 2256, 6710.
 Thiruvengadam, T.K. 4844.
 Thiry, E. 6471, 6476.
 Thyagarajan, P.V. 4487.
 Thynne, C.O. 6763.
 Thofern, E. 4948.
 Thom, J. 2472.
 Thoma, R.W. 5875.
 Thomas, A.A. 8539.
 Thomas, A.D. 2469.
 Thomas, B.J. 2017, 8820.
 Thomas, C.E. 2067, 5498.
 Thomas, C.S. 8945.
 Thomas, D. 38, 7932.
 Thomas, D.L. 8642.
 Thomas, E.J. 6335.
 Thomas, G.G. 5502.
 Thomas, G.W. 345, 5565, 5566.
 Thomas, J. 6381.
 Thomas, J.D.R. 3057.
 Thomas, J.E. 7189.
 Thomas, J.L. 6956.
 Thomas, J.W. 3723.
 Thomas, M.-A. 861.
 Thomas, M.L. 4884.
 Thomas, M.V. 6387.
 Thomas, P.E. 8947.
 Thomas, P.L. 5503.
 Thomas, T.D. 1873, 6191, 6994.
 Thomas, W.E. 5387.
 Thomas, W.T.B. 2067.
 Thomashow, M.F. 8866.
 Thomazin-Casagrande, L.I. 8979.
 Thomer, A. 1791.
 Thompson, B.K. 2746, 2748.
 Thompson, C.J. 5759.
 Thompson, D.L. 6204.
 Thompson, D.P. 5126, 7759.
 Thompson, G.J. 3017.
 Thompson, G.J. 5257.
 Thompson, I.M. 2332, 4119.
 Thompson, J.A. 9018.
 Thompson, J.E. 2337.
 Thompson, J.S. 2454, 3316.
 Thompson, K.D. 7017.
 Thompson, M.M. 249, 7937.
 Thompson, R.L. 504, 7871.
 Thompson, T.A. 1656.
 Thompson, W. 401.
 Thompson, W.H. 596.
 Thomson, K.J. 5169.
 Thomson, A. 3502.
 Thomson, A.J. 3407, 5141.
 Thomson, G.A. 5777.
 Thomson, J.E. 1049, 1066, 3322, 7009.
 Thomson, K. 7493.
 Thomson, K.S. 3089.
 Thomson, R.B.J. 4036.
 Thomson, R.H. 158.
 Thomson, R.O. 4481.
 Thomson, H. 6653.
 Thonart, P. 8666, 8621.
 Thongmeekorn, P. 4505.
 Thorley, C.M. 7624.
 Thormar, H. 638.
 Thornburgh, D.A. 3924.
 Thoreley, R.N.F. 903, 2609.
 Thornhill, P.J. 5240.
 Thornhill, J.H. 5041.
 Thornley, P.E. 9087.
 Thorsberry, C. 436, 484, 487, 502, 503, 531, 1392, 2238, 2259, 2262, 3012, 3095, 3105, 4712, 4791, 4819, 4834, 4835, 4865, 5774, 6455, 6511, 7439, 7447.
 Thornton, D.H. 5038, 6658, 8453.
 Thorsen, J. 2434.
 Thorsett, E.D. 2306.
 Thorsvaldsen, G. 4111.
 Thottapillay, G. 3784, 7137.
 Thouverain, J.C. 4512, 7144.
 Threlfall, E.J. 3998, 9058.
 Thuma, N.K. 3677.
 Thumar, B. 2280.
 Thune, R.L. 7762.
 Thunell, R.K. 4450.
 Thurston, C.F. 5242, 5243, 6099, 6101.
 Thurston, H.D. 8097.
 Tian, S.-Z. 3542.
 Tian, S.F. 6602.
 Tian, X. 4996.
 Tibaldi, E. 7877.
 Tidelius, K.H. 8598.
 Tighurust, J.R. 6645.
 Tichacek, B. 4962.
 Tiedje, J.M. 2701, 4438, 5670, 6160.
 Tiemens, K.M. 6425.
 Tien, M. 3452, 6011.
 Tierney, B.M. 3267.
 Tietze, K.L. 5067.
 Tiguad, S. 3124, 7444.
 Tignor, G.H. 4999.
 Tjane, M. 6007.
 Tikanmaek, E. 4114.
 Tikhonenko, T.I. 2319, 4073.
 Tikhonov, V.V. 2281.
 Tikhonova, A.S. 476.
 Tikhonova, G.V. 2589.
 Tilak, K.V.B.R. 3461.
 Tilled, P. 4664.
 Tilly, F.-W. 6845.
 Tiliail, J. 1730.
 Tiltstone, W.J. 1950.
 Tilton, R.C. 780, 6784.
 Timbury, M.C. 2204.
 Timian, R.G. 4516.
 Timkovich, R. 3439, 7701, 8520.
 Timmer, L.W. 284, 827, 1136.
 Timmermans, P. 1492.
 Timoney, F.J. 5314.
 Timuk, O.F. 2309.
 Tindall, E.E. 2416.
 Ting, H.H. 6519, 6528, 9195.
 Ting-H, S.H. 383, 384, 3934, 5577, 5623, 5627.
 Tinsley, J. 5946.
 Tinsley, T.W. 7772.
 Tinyanova, N.S. 914.
 Tioilias, P. 6594.
 Tirol, C. 7156.
 Tirol, P.A. 1835.
 Tisdell, C.A. 3888.
 Tison, D.L. 6786.
 Tissarat, N. 1138, 7991.
 Titledbaum, M. 556.
 Tjia, J. 3326.
 Tlunova, N.A. 920, 2572, 6855, 6875, 7099, 7559.
 Tlussa, E. 5968.
 Tiwari, R. 440, 8768.
 Tizard, M. 7043.
 Tjepkema, J.D. 2898, 4605, 4606, 4607, 8499.
 Tjesson, D. 8781.
 Tjin A Tsai, A. 5730.
 Tkachenko, A.V. 2328.
 Tkachenko, E.A. 7570, 8455.
 Tkachuk, N.I. 7358.
 Tkacher, Y. 1857.
 Tkhruni, F.N. 9200.
 Toama, M.A. 7062, 7091.
 Tobin, M.J. 5850.
 Tobin, R.S. 6437.
 Tochikura, T. 6061.
 Toda, K. 6005.
 Todaro, L. 6532.
 Todd, J.A. 1397.
 Todd, M. 5255.
 Todd, N.K. 7630.
 Todea, V. 7014.
 Todhunter, M.N. 3918.
 Toerien, D.F. 7512.
 Toerien, J.C. 8125.
 Toft, R.W. 4808.
 Toft, P.J. 8677.
 Toivonen, A. 4114.
 Tovola, A. 5285.
 Toivola, T. 4287.
 Tokuda, H. 8653.
 Tokuhisa, S. 5886.
 Tokunaga, F. 4257.
 Tokushige, M. 1788.
 Tokuyama, T. 4287.
 Tolbert, B. 889.
 Toledo, M.V. 1200.
 Toliari, S. 2715.
 Tolle, A. 8708.
 Tolle, D.A. 3951, 8257.
 Toliner, E.W. 7509.
 Tolman, R.L. 1349.
 Tolman, R. 3168.
 Tolmash, M.E. 6886.
 Tolome, M. 6718.
 Tolpin, M.D. 4072.
 Tolstikov, G.A. 1322.
 Tolstokrov, I.I. 1043.
 Tolxdorff-Neutzing, R.M. 4702.
 Tom, W.K. 2645.
 Toma, M.K. 2667, 7669.
 Toma, S. 1587.
 Tomar, J.S. 7250.
 Tomasz, A. 5712, 9064.
 Tomenius, K. 4513, 6275.
 Tomer, K.B. 5024.
 Tomerlin, J.R. 1197, 3957.
 Tomes, L. 8778.
 Tomimoto, M. 3115.
 Tominaga, N. 3142.
 Tominaga, Y. 7688, 7691.
 Tomoka, H. 8298.
 Tomosaka, S. 1441.
 Tomita, F. 954.
 Tomita, K. 1702, 6067.
 Tomita, Y. 7390.
 Tomiyama, K. 2014.
 Tomiz, H. 9097.
 Tommerup, I.C. 402, 5644.
 Tomoda, H. 8528, 8529.
 Tomonoh, S. 3109.
 Tompkins, R.B. 6981.
 Tompkins, D.S. 2483.
 Tompkins, G. 6921.
 Tompkins, E. 9124.
 Tonew, M. 9150.
 Toney, S. 7597.
 Tonin, E. 657.
 Tonio, C. 3140.
 Trousse, M. 3241.
 Tomura, B. 901.
 Too, H.L. 5879.
 Tooley, P.W. 8776.
 Toop, P. 7547.
 Toporan, M. 2467.
 Topor, S. 2995.
 Toran-Diaz, J. 148, 996, 6929.
 Toranzo, A.E. 9072.
 Toranzos, G.A. 9283.
 Toraya, T. 6046.
 Torchilin, V.P. 7689.
 Torrell, S. 8328.
 Torfascio, G. 8448.
 Toride, Y. 8527.
 Torii, K. 6008.
 Torikata, A. 2292.
 Torma, A.E. 6393.
 Toropova, E.G. 1857.
 Torrey, M. 7526.
 Torrey, W.-Y. 7042.
 Torrance, L. 3400, 6249.
 Torres-Vieira, R. 1902.
 Torres-Alegre, V. 6122.
 Torres, E. 2876.
 Torres, H. 4559.
 Torrey, S. 2541, 3375.
 Torrey, J. 1831.
 Tortora, J.C.O. 6757.
 Tosa, T. 7, 75, 3443, 5102.
 Toscano, L. 1402.
 Tost, E. 2395, 8422.
 Totsuka, M. 5996.
 Totten, P.A. 679.
 Toulme, J.-J. 4255, 4256, 4259.
 Tournier, P. 1863.
 Toussaint, A. 3823.
 Tovarova, I.I. 4846.
 Tovan, J.A. 6431.
 Towers, G.H.N. 3060, 6446.
 Town, M.M. 4035.
 Townner, J.C. 7333.
 Townsend, C.A. 742.
 Townsend, D.E. 327, 9066.
 Townsley, P.M. 4067.
 Toxopeus, R. 6709.
 Toyama, H. 1314, 4722.
 Tozawa, Y. 949.
 Trabulsi, I.V. 2952, 2953, 5399.
 Tracey, G.M. 7325.
 Traegardh, G. 8676.
 Tramont, E. 2209.
 Tramont, E.C. 4890.
 Tranter, H.S. 4010.
 Trepane, T.L. 3147.
 Trappe, J.M. 5546, 5549, 5579, 5582, 5607, 6323, 8218.
 Traquair, J.A. 8843.
 Traub, W.H. 3048, 8519.
 Traut, R.R. 7660.
 Trautwein, A.X. 5176.
 Trautwein, S.M. 6667, 6668.
 Traxler, P. 1440.
 Traxler, R.W. 1303, 5705.
 Trefts, P.E. 461.
 Trejo, W.H. 1448, 1450.
 Tremblay, F.M. 8184, 8154.
 Tremaux, J.C. 5769.
 Trenholm, R.L. 2746, 2748.
 Trenholme, G.M. 736, 4744.
 Trepanie, P. 645.
 Trepanie, R.W. 1794, 3315, 5050.
 Trescony, P.F. 5203.
 Tresselt, D. 533.
 Treuhaft, M.W. 1646.
 Trevathan, L.E. 6290.
 Trevors, J.T. 400, 412, 8988.
 Trevors, K.E. 5333.
 Trexler, P.C. 2421.
 Trevarco, M.K. 5315.
 Trifonova, Z.N. 4058, 7454.
 Trigrano, R. 4550, 8136.
 Trimblis, D.S. 3835.
 Trinchant, J.-C. 6381.
 Trinck, A.P.J. 1677, 6815.
 Trinck, M.J. 2124, 3360.
 Triolo, E. 7889.
 Tripathi, K.K. 440.
 Tripathi, N.N. 5505, 9106.
 Triplehorn, B.W. 7960.
 Triplett, E. 2611.
 Troeger, R. 5395.
 Trolymow, J.A. 4631, 4638.
 Troitsky, A.V. 7706.
 Trojanowska, K. 226, 1079.
 Trojanowski, J. 7754, 7819, 8673.
 Troke, P.F. 5734.
 Troiloff, B. 3312.
 Troiloff, D.R. 8424.
 Trotsenko, Y.A. 1781.
 Trotta, I. 9160.
 Trotter, I.S. 6419.
 Trotter, M. 2833.
 Troupe, N. 1436, 1442.
 Troussellier, M. 3241.
 Trovitzsch, W. 3126.
 Trosy-Blomberg, M. 633.
 Truant, A.L. 1548.
 Truchet, G.L. 3953, 6388.
 Truckees, M.W. 8727, 8732.
 Trudel, M. 448, 4965, 4990, 6656.
 Trudgill, D.L. 6217, 8272.
 Trudgill, P.W. 7822, 8277.
 Trulear, G.M. 3205.
 Trumpheller, S. 5341.
 Trung, B.C. 2985.
 Truscott, R.B. 1793.
 Trushnaka, G.N. 1704.
 Truskinov, E.V. 6294.
 Trust, T.J. 6053.
 Trutko, S.M. 9045.
 Tryakova, V. 778.
 Tsai, L. 7526.
 Tsai, W.-Y. 7042.
 Tsaihong, J.C. 3404.
 Tsang, J.C. 1404.
 Tsang, V.C.W. 2512.
 Tsaio, G.T. 983, 2539, 3447, 3589, 3597, 3644, 5157, 5262, 8545.
 Tsaio, P.H. 5515.
 Tsay, G.C. 6663.
 Tschernell, K. 4568.
 Tse, K.M. 9329.
 Tsen, C.C. 6986.
 Tsigogiou, D. 2563.
 Tsezon, M. 7978, 9028.
 Tsiuquay, K.N. 6642.
 Tsou, C. 7566.
 Tsubaki, K. 8686.
 Tsubaki, M. 3144, 3145.
 Tsubokura, M. 7007.
 Tsubota, O. 6321.
 Tsubotani, S. 6551.
 Tsubouchi, H. 1081, 3694.
 Tsuchida, T. 89.
 Tsuchie, H. 1552.
 Tsuchida, G. 6163.
 Tsuchihashi, G. 8644.
 Tsuchihashi, H. 5202.
 Tsuchi, A. 2710, 6163.
 Tsuchiya, F. 2630.
 Tsuchiya, H. 1732.
 Tsuchiya, H.M. 3673.
 Tsuchiya, K. 8253, 8523.
 Tsuchiya, K.R. 1623.
 Tsuchiya, M. 981.
 Tsuchiya, T. 3440, 9198.
 Tsuchizaki, T. 5416.
 Tsuda, J. 862.
 Tsuda, K. 99.
 Tsuda, T. 1742.
 Tsuda, Y. 8686.
 Tsui, A. 2528.
 Tsui, H. 7187.
 Tsui, K. 1378.
 Tsui, T. 6521.
 Tsujimoto, K. 4257.
 Tsutsuka, Y. 1784, 1786.
 Tsujita, T. 6869.
 Tsujita, Y. 519.
 Tsukada, Y. 2580.
 Tsukamoto, T. 2619.
 Tsukamoto, T. 2578.
 Tsukamura, M. 3046, 4722, 734, 9084.

Author Index

- Verma, D.P.S. 2978, 4668, 6365, 9005, 9339.
Verma, H.N. 5535, 8140, 9139.
Verma, J.P. 6311.
Verma, K.C. 4155.
Verma, K.S. 8807.
Verma, V.S. 2044, 4547, 7252.
Veron, M. 7723.
Veronese, F. 893.
Veronese, F.M. 73.
Veronese, M. 5737.
Verpoorte, R. 5730.
Verrall, M.S. 6783.
Versari, P.L. 5080.
Verstraete, W. 4102.
Verstraete, W. 4121, 1491, 1843, 2147, 2333, 2932, 3203, 6693, 7514.
Verstraeten, L.M.J. 2147, 2932.
Vertonghen, C. 5219.
Veruovic, B. 6021.
Vesa, V.S. 7689.
Veschambre, H. 1681.
Vescovo, M. 2282.
Vessela, A. 4094.
Veselov, S.Yu. 8435.
Vesely, D. 8111.
Vestal, J.R. 1535, 5619, 8283.
Vetugani, L.A. 6485.
Vetten, H.J. 3783, 3784, 4538, 4540.
Vetterlein, D.A. 3429.
Veum, T.L. 7883.
Veverka, K. 3009.
Vezina, C. 3131.
Viel, J. 2387.
Vianello, A. 7122, 8744.
Viano, I. 6483.
Vice, S.F. 1780.
Vicente, A. de 1499.
Vick Roy, T.B. 864.
Vickroy, G.A. 3407.
Vickers, R.M. 5854.
Vidal, M. 6336.
Vidaver, A.K. 1100, 6240.
Vidrine, M.F. 5264, 6902.
Vienna Guimaraes, W. 7005.
Vielvare, J. 8122.
Vienna, P. 5289.
Viennot-Bourgin, G. 5464.
Viestur, U.E. 114.
Vieth, V.H. 4250.
Vigari, A. 2274.
Vignani, G. 5234.
Vigli, E.L. 2092.
Vignais, P.M. 2567.
Vigo, S. 8698.
Vigorita, M.G. 7394.
Vij, M. 3034.
Vijakshore, P. 3609, 7770.
Vijaya Rao, D. 7037.
Vijayalakshmi, M. 3430.
Vik, J. 5479.
Vikhansky, Yu.D. 1043.
Vilanen, M.K. 2488.
Viljanen, P. 5784, 6548.
Vilker, V.L. 379.
Villa, T.G. 6036.
Villacorta, A. 6910.
Villalain, J. 7713.
Villan, B. 8902.
Villanueva, J.R. 6036.
Villareal, R. 3320.
Villareal, L.P. 6744.
Villesot, D. 553.
Villetaz, J.C. 164.
Villiger, W. 9314.
Vinarov, A.Yu. 5080.
Vincent, E.V. 5021.
Vincent, J.M. 6384.
Vincze, P. 3124, 7444.
Vincze, B.J. 6777.
Vinegov, H. 6476.
Viney, J. 4788.
Vining, L.C. 3374, 4053, 4854, 8355.
Vink, R. 8531.
Vinoogradova, I.D. 2557.
Vintner, F.P. 5672.
Vintner, L. 6769.
Viraagharavan, V. 7520, 8273.
Virden, R. 5158.
Virtanen, P. 4932.
Vizzo de Santo, A. 2991.
Vischer, W. 5921.
Viscidi, R.P. 230, 6216.
Visconti, A. 7083.
Visser, C.M. 1295.
Visser, S. 7227, 7228.
Visser, S.A. 7838.
Vistnes, A.A. 3325.
Vishwanatha, T. 1780.
Vitalis, L. 4855.
Vitolo, M. 8535.
Vitousek, P.M. 7223.
Vitolovskaya, G.A. 5198, 6054.
Vitt, S.V. 1536.
Vivanco, M.M.V.-D. 6764.
Vizieteli, J. 4965.
Vizoso, J.H. 7195.
Vlachos, I. 1909.
Vlasenko, A.Y. 4857.
Vlasova, O.K. 4417, 7813.
Vlassak, P. 2147, 2932.
Vleggaar, R. 3744, 4469, 4470, 4471, 5256, 5378.
Vliegthart, J.F.G. 542.
Vliegthart, J.F. 4021.
Vnek, J. 6652.
Vodkin, M.H. 1083.
Vodrazka, Z. 2618.
Voegtlin, J. 5921.
Voelksch, B. 2763.
Voerens, N. 4676.
Voelvodin, A.F. 6739.
Vogel, H.C. 3376.
Vogels, G.D. 1295, 1703, 3553, 4282, 4876.
Vogelsanger, J. 270, 342.
Vogt, D.J. 5945.
Vogt, K.H. 9278.
Vogt, K.A. 3945.
Vogt, R. 566.
Voigt, C.K. 388.
Voigt, G.K. 558.
Vojtescu, V. 2469.
Vojtkova, G. 3608.
Vojtkov, V. 778, 4786, 6021.
Vojtkova, A. 3420.
Volesky, B. 976, 3598, 3978, 9235.
Volfova, O. 4353.
Voin, R.B. 277.
Volk, B.G. 8785.
Volk, V.V. 310, 4675.
Volikova, U. 2405.
Volikovsky, V.A. 4942.
Volikova, V.L. 5241.
Vollet, J.J. 7526, 3290, 3160.
Volterrbst-Schenck, K. 1847.
Volmer, R. 2340.
Volnova, A.I. 6947.
Volodina, E.A. 1261.
Volpe, G. 6568.
Volterra, L. 4128, 8422.
Voiz, K.W. 4323.
Von Allen, H. 1964.
Von Graevenitz, A. 1659, 3262, 4842, 541.
Von Konow, L. 7334.
Von Montgelas, A. 2761.
Von Nicolai, H. 2515.
Von Tigerstrom, R.G. 3519.
Von Wechmar, M.B. 263, 2789, 2790, 8787.
Vongkayson, T. 3639.
Vongniguna, A. 5835.
Vora, K.A. 6170.
Vora, K.C. 4833.
Vorgers, S. 29.
Vorkunova, G.K. 8322.
Vorland, L.H. 4812.
Vorlop, K.-D. 1003, 4373.
Vorlop, N.O. 5, 1968.
Vorob'eva, L.I. 3579.
Vorob'eva, L.I. 964.
Voroney, R.P. 8224.
Voronin, A.I. 5659.
Voronin, S.S. 6442.
Voropaeva, S.D. 7332.
Voroshilova, O.I. 5170.
Vorotilo, S.P. 1883, 6942.
Vorster, B.J. 1939.
Vosbeck, K. 6771, 9088.
Vose, P.B. 2156.
Voskoboyev, A.I. 6014, 7739.
Voskoboyev, A.I. 925.
Votruba, I. 465.
Votruba, J. 4679, 6035, 9235.
Votyakov, V.I. 4701, 4764.
Votruba, M. 2320.
Vovk, O.A. 4182.
Vovno, L.I. 5061.
Vrana, D. 7636.
Vrancoy, R.P.L. 6600.
Vrancoy, J. 2946.
Vranjak, M. 8476.
Vrsanica, M. 3671.
Vrushka, V.M. 1929, 7895.
Vujic, L.K. 636.
Vuye, A. 7373.
Vyas, G.M. 6612.
Vyas, K.L. 5421.
Vyas, K.M. 3944, 8138.
Vyss, M.C. 4800.
Vybornykh, S.N. 1403, 4879, 5974.
Vymla, F. 5715.
Vyapich, A.N. 4038.
Vysekantsev, I.P. 1550.
Vystyrl, A. 7339.
Wachenheim, D.E. 9301.
Wachsmuth, I.K. 1934, 4690.
Wachsmuth, K. 5389, 6781.
Wackertbauer, K. 4414.
Wada, Y. 6551.
Wade, G.L. 8490.
Wade, M. 6304.
Wade, R.S. 6159.
Wade, W.F. 9855.
Wadewitz, A.G. 5260.
Wadke, M. 1585.
Wadke, D.H. 2813.
Wadstrom, T. 8428.
Wadstrom, T. 232, 1933, 1957, 7113.
Wadsworth, H.J. 4768.
Wahner, R.S. 3586.
Waelchi, O. 1247.
Waelstung, U. 3840.
Wagenet, R.J. 6383.
Wagenknecht, T. 7702.
Waggoner, P.E. 1097.
Wagih, E.E. 421.
Wagman, G.H. 6795.
Wagner, F. 978, 2582, 5221, 7777.
Wagner, J.L. 6622.
Wagner, K. 1290, 4444.
Wagner, M.K. 7021.
Wahab, S. 4016.
Wahab, S.S. 2679, 2680, 3632, 441, 257.
Wahlgren, M. 633.
Wahua, T.A.T. 7264.
Waid, J.S. 5630.
Waid Khan, M. 1325.
Wairmright, M. 2201, 7258, 8968.
Walters, J.A. 6561.
Waite, I.M. 4969.
Waite, W.J. 5748.
Waiz, J.A. 2294.
Wakabayashi, S. 6843.
Wakamiya, K. 981.
Wakamizu, T. 2290, 3160.
Wakao, N. 5691.
Wakarchuk, W.W. 6017, 6018, 6833.
Wald, S. 6230.
Wald, S. 3474.
Waldner, M. 7279, 7113.
Waldman, S.J. 3354.
Waldner-Sander, S. 1701.
Waley, S.G. 6533.
Wal, N.R. 9246.
Walker, A.K. 8079, 8085, 8086.
Walker, C. 5556.
Walker, C.B. 5753.
Walker, D.E. 8056.
Walker, G. 3328.
Walker, G.C. 7336.
Walker, G.E. 7263, 8223.
Walker, G.A. 1505.
Walker, A. 1249.
Walker, H.W. 4019, 7023.
Walker, J. 2024.
Walker, M. 5722.
Walker, M.E. 1121.
Walker, M.L. 4805.
Walker, N. 930.
Walker, R.I. 3118, 4851, 5775.
Walker, V.V. 6366.
Walkey, D.G.A. 1208, 6259.
Wall, E. 5612.
Wall, R.E. 1239.
Wall, J.A. 3838.
Wallace, J.B. 3618.
Wallace, J.L. 7497.
Wallace, L. 2725, 7820.
Wallace, R.J. 1405, 7342.
Wallace, T.W. 5255.
Wallon, L. 1790.
Waller, J. 5302.
Waller, J.-P. 1801.
Waller, J.M. 2796, 3396.
Walsh, H. 8429.
Walsh, C. 4291.
Walsh, C.T. 8560, 8561.
Walsh, E.E. 3437.
Walsh, P.K. 5277.
Walther, H. 7917.
Walther, J.A. 8378.
Walther, M. 867.
Walther, R.G. 4140.
Walther, T.J. 8599.
Walther, W.M. Jr. 6974.
Walters, D.R. 1130, 5434.
Walters, R.P. 3220.
Walting, A.E. 8731.
Walton, W.D. 3328.
Walton, G.S. 6093.
Walton, J.D. 1123, 1983, 7910, 8765.
Waltrap, S.C. 3206.
Wamburkar, M.N. 4003.
Wampler, D.E. 5018, 6603.
Wan, H. 5480.
Wan, Z. 1819.
Wanderlin, L.M. 2457.
Wandrey, C. 3, 171, 4122, 4123, 4261.
Wang, C.-Y. 3485.
Wang, C.-T. 7357.
Wang, D.-H. 2813.
Wang, D.-M. 5030.
Wang, D.I.C. 2270, 4270, 7435.
Wang, G. 4270.
Wang, H. 5180.
Wang, H.Y. 3402, 3619, 4041, 5238.
Wang, J. 81, 5029.
Wang, J.K. 1747.
Wang, M. 506.
Wang, M.-C. 2075.
Wang, M.-H. 7434.
Wang, M.-L. 4269.
Wang, M.-Q. 1147.
Wang, N.S. 175.
Wang, P.Y. 3595.
Wang, Q. 71, 81.
Wang, S.-S. 7485.
Wang, S.-Z. 7485.
Wang, S.S. 2679, 2680, 3632, 441, 257.
Wang, S.S.-S. 8173.
Wang, W.-L. 2514, 2522, 3309.
Wang, W.-L. 702, 1650, 2466, 3226, 5659, 9167.
Wang, W.-N. 3542.
Wang, Y. 5897, 6738, 7657, 7658.
Wang, Y.-S. 6945, 8358.
Wang, Z. 506.
Wangikar, P.D. 7966.
Wani, S.P. 8967.
Wani, W. 2426.
Warcup, J.T. 2132, 7145.
Ward, A.C.S. 4147.
Ward, A.C.S. 4147.
Wardchuk, W.W. 6017, 6018, 6833.
Ward, G.B. 936.
Ward, G.M. 999.
Ward, J. 7573.
Ward, J. J. 3259.
Ward, J.B. Jr. 8722.
Ward, J.L. 428, 444, 1381.
Ward, L.R. 3998.
Ward, N.R. 9246.
Ward, O.P. 2602.
Ward, P.B. 7371.
Ward, P.C. 1448.
Ward, R.J. 8051.
Ward, R.L. 2026.
Ward, T.E. 8568.
Wardlaw, A.C. 4483.
Warembourg, F. 411.
Warner, A. 4982.
Wargo, P.M. 5586, 8948.
Waring, M.J. 520, 3133, 5799, 8369, 8370.
Warne, D.D. 3947.
Warneke, J.E. 7519.
Warner, A. 1293, 6344.
Warner, J. 6250.
Warr, R.G. 2694, 4415, 7795.
Warren, D. 5783.
Warren, M.M. 734.
Warren, N.G. 754.
Warner, R.A.J. 6017, 6018.
Warzywoda, M. 1803, 5158.
Wase, D.A.J. 2707, 3230, 8509, 9332.
Wasie, J.H. 7138.
Wasie, E.J. 7339.
Wasie, C. 5328.
Washington, J.A. I, 1666.
Washington, J.A. II, 5084, 3267, 4036, 5038.
Washington, W.S. 3876.
Wasilaukas, B.L. 3275.
Wasikiewicz, D.E. 7699.
Waserman, A.E. 4732, 7039.
Waserman, D.E. 3495.
Waserman, H.J. 921.
Waserman, S.A. 4736.
Wasinski, H. 885, 2608, 8630.
Wast, S.S. 6330.
Wastie, R.L. 7495.
Watabe, H. 211.
Watabe, K. 2555, 6560.
Watahiki, M. 2157.
Watanabe, A. 2300, 7460.
Watanabe, C. 7478.
Watanabe, H. 884, 5823.
Watanabe, I. 2993, 3261, 3958, 7297.
Watanabe, K. 211, 894, 1445, 1772, 3096, 4284, 7111.
Watanabe, K.A. 4022, 6482.
Watanabe, M. 1953, 8666.
Watanabe, S. 3329, 3989, 6297.
Watanabe, T. 1330, 1332, 2444.
Watanabe, T. 3054, 3055, 5996, 7374, 7375, 7376, 8763.
Watanabe, W. 3691.
Watanabe, Y. 1767, 2261, 2355, 2616, 3471, 3540, 5782, 8589.
Watanugi, F. 7107.
Waterhouse, J.M. 4503, 8460.
Watermeyer, S.R. 6261.
Waters, H. 2046.
Waters, J.K. 1653.
Watkins, B.A. 2758.
Watkins, J.T. 4481.
Watkins, P.A. 2020.
Watkins, S. 3319.
Watling, R.J. 3017.
Watnrad, L.S. 391, 8481.
Watson, A.K. 6073.
Watson, C.E. Jr. 6290.
Watson, I.A. 285.
Watson, K. 968.
Watson, R.D. 1025.
Watt, B. 3164.
Watt, B.A. 5213.
Watt, P.R. 743.
Watkinson, D.M. 5992.
Watts, S.H. 346, 347.
Wauters, D. 7626.
Wayne, M.M.Y. 8573.
Weathers, P.J. 3623.
Weaver, J.C. 154, 170.
Weaver, H.W. 6370, 7291, 8994.
Weaver, S.S. 6505.
Webb, C. 4219.
Webb, D.T. 2907.
Webb, E. 2586.
Webb, M.R. 3511.
Webb, R.E. 7561, 8094, 8491.
Webb, R.S. 2921, 8943.
Webber, J.F. 7232.
Webber, J.J. 2452.
Webber, A. 509, 4651, 5780.
Webber, B. 6988.
Webber, C.J. 3014.
Webber, D.J. 5516.
Webber, D.V. 7069.
Webber, F.H. 6824.
Webber, H.C. 8204.
Webber, J. 2818.
Webber, J.E. 8525.
Webber, J.M. 600.
Webber, R. 5386, 5387.
Webber, W.J. Jr. 388, 565.
Webster, D.B. 4506.
Webster, I.A. 2428.
Webster, J.M. 2864.
Webster, R.K. 316, 5436, 7981.
Weckend, B. 7838.
Weckes, S. 5596.
Wedderburn, M.E. 2160.
Wedum, A.G. 1522.
Weed, L.A. 5037.
Weerasooriya, S.V.R. 2398.
Weesner, D.E. 731, 770.
Weiss, J.D. 2084.
Wegner, E.H. 5115.
Wegner, G.H. 7880.
Wegner, F.C. 8120.
Wehrli, R. 4842.
Wehrli, W. 1440, 7340.
Weimer, P.P. 6690.
Weinbull, C. 9314.
Weide, H. 6169.
Weidmann, G.J. 8041.
Weisel, J.E. 3191, 7513.
Weisgele, M. 6532.
Weigert, D.A. 632.
Weigle, K.A. 4168.
Wein, J.L. 7850.
Weijer, W.J. 939.
Weijman, A.C.M. 7200.
Weiland, P. 5876.
Weimer, P.P. 6690.
Weinbaum, G. 8411.
Weinberg, E. 774, 6458.
Weiner, M. 791.
Weinmann, W. 6653.
Weinstein, M.I. 6795.
Weinstein, M.P. 702, 2514, 2522, 3288.
Weinstein, R.A. 8292.
Weintraub, A. 6687.
Weintraub, M. 2380.
Weissblum, B. 9055.
Weiser, J. 5261.
Weisman, Y. 4153.
Weiss, E. 776, 3118.
Weissbach, A. 4499.
Weissbach, F. 1042.
Weissberger, B. 774.
Weissfeld, S.A. 635, 965, 1915, 2211.
Weissman, J.G. 5694.
Weisz, P.R. 7293.
Weitzenhoff, M.H. 7489.
Weitzman, I. 1672.
Werkle, J. 6864.
Weborn, A.L. 672.
Weich, D.F. 783, 3321, 9292.
Weich, J.E. 8901.
Weich, R.P. 7534.

- Velch, W.D. 7424, 7577.
Veller, C.L. 5290.
Veller, D.M. 336.
Velling-Westler, S. 6649.
Velling, B. 2841, 8782.
Velling, G.W. 6649.
Vellings, F.M. 2385.
Vellner, R.C. 1565.
Vellis, D.E. 7487.
Vellis, H.D. 1848.
Vellis, J.S. 1589.
Vellis, J.S. 1448, 1450.
Vellis, P.W. 7488.
Velsler, M.J. 8833.
Vesh, F.W. 3546, 4381, 6812.
Vesh, K.M. 3511.
Vetty, R.E. 2784, 5485, 5527.
Vetizien, H.C. 3786.
Vemambu, S.N.C. 7416.
Vermys, K.B. 152.
Ven, Y.-X. 4996.
Wendall, D. 7369.
Wendenbaum, S. 870.
Weng, H.-S. 5195.
Wenger, R.M. 8625.
Wengler, M. 3319.
Wenham, C.T. 2112, 2113.
Wen, C. 1914, 1916.
Wennersten, C. 4697.
Wennerstrom, D.E. 3404.
Wentworth, B.B. 3288, 7607, 9256.
Werner, R.P. 7422.
Werber, L.M. 8304.
Werk, R. 8346.
Werner, U. 4262.
Werneck, A.M. 6946.
Werner, D. 6362, 6363, 8207.
Werner, G. 4873, 8372.
Werner, R.G. 9079.
Wernin, M. 4937.
Wesley, R.D. 2462.
Wesley, R.L. 1053.
Wessels, P.L. 4469, 4470, 4471, 5256.
West, A.A. 943.
West, A.B. 2475.
West, A.H. 9309.
West, A.W. 3580.
West, A.C. 297.
West, M.E. 664.
West, P.A. 1622, 9286.
West, R. 7904.
Westbrook, P. 2543.
Westbrook, W.G. 718.
Westby, C.A. 982, 8656.
Westcott, R.J. 3858.
Weste, G. 359, 5605.
Westermann, P. 3263.
Westfall, L.M. 3263.
Westfelt, E. 2423.
Westgarth, D.R. 571.
Westhoff, D. 7421.
Westhoff, D.C. 6176, 6958.
Westlake, D.W.S. 1619, 4684, 5776, 7310, 8286.
Westler, J.W. 1432, 1436, 1442.
Westmacott, D. 6554, 9151.
Westkowski, M.A. 1670, 2460.
Wetter, C. 4566, 8828.
Wetzel, R. 6477.
Wetzel, C. 4575.
Wetzel, T.F. 4946.
Wetzstein, H.Y. 3814.
Wexler, H. 3101.
Wey, J.G. 6369, 6371.
Whaley, D.N. 1644, 2457.
Whalley, A.J.S. 5246.
Wharton, D.A. 9268.
Wheat, C.K. 2745.
Wheat, L.J. 7622.
Wheat, P. 6401.
Wheat, P.F. 9191.
Wheatley, M.A. 5190.
Wheeler, C.T. 346, 347.
Wheeler, H. 1103, 8754.
Wheeler, M.W. 6983.
Whelstone, R.J. 5722.
Whipp, J. 5722.
Whips, J.M. 2930, 8130.
Whitaker, A. 5096.
Whitaker, J.R. 2594.
White, A. 7622.
White, B.A. 4305.
White, C.A. 6975.
White, D.C. 5817, 8202.
White, D.M. 246, 7879.
White, C.B. 1192.
White, G.F. 189, 880.
White, J.B. 275.
White, J.D. 1849.
White, J.F. 1227.
White, J.G. 8121.
White, J.O. 6730.
White, L. 4165.
White, L.O. 530, 6467, 9173.
White, P.F. 8109.
White, R.E. 3668, 5667.
White, R.F. 1141, 8076, 8928.
White, S.W. 7662, 7663.
White, J. 3496.
Whitcross, M.I. 651.
Whitehead, A.J. 7517.
Whitford, W.G. 6392.
Whithear, K.G. 3087.
Whiting, F.M. 2743.
Whitney, R.J. 652.
Whitmore, T.N. 1458.
Whitney, G.K. 5803.
Whitney, R.D. 2922.
Whittington, W. 2453.
Whittle, D.J. 6018.
Whittle, J.L. 654.
Whitty, D.A. 1594.
Whyte, A. 2595.
Whyte, W. 583.
Wiblin, C.N. 2438.
Wichmann, R. 3.
Wichmann, S. 5031.
Wicker, M. 5583.
Wicks, J.P. 1668.
Wickiffe, C. 631.
Wicklow, D.T. 2756, 3653, 6948, 8784.
Wicks, T. 1182.
Widell, A. 5882.
Widstrom, N.W. 8083.
Wiedemann, B. 4702, 4711, 4840, 6404.
Wiedemann, M. 4444.
Wieden, M.A. 815.
Wiedmann, B. 7307.
Wiegand, H. 4963.
Wiegand, J. 931, 5283, 5284.
Wiegand, K.J. 470.
Wieland, T. 2759, 3755, 7664, 7906.
Wierner, D.F. 2221.
Wienerke, A.A. 6180.
Wierlicki, E. 7039.
Wieringa, W. 9140.
Wieringa-Brand, D.H. 6225.
Wiese, M.H. 7951.
Wiewiorowska, M. 226, 1079.
Wigand, R. 2439, 2440.
Wiggs, J. 59.
Wigmore, A.S. 193.
Wiesandera, R.L. 5185.
Wiefelmann, C. 2974.
Wiklund, T. 7367.
Wilcox, C.J. 4959.
Wilcox, D. 7497.
Wilcox, H.E. 5561, 5647, 7637.
Wilcox, J.R. 5473.
Wilcox, K.R. 4978.
Wilcox, W.W. 5585.
Wilcoxson, R.D. 265, 1991, 3808, 5400, 5492, 8069, 8073, 8786.
Wild, B.L. 2200.
Wild, J.R. 2889.
Wildermuth, G.B. 7145.
Wildonger, K.J. 6536, 6576.
Wiley, C.A. 4178.
Wiley, D. 3386.
Wilhelm, M.E. 7220.
Wilhelmi, I. 7318.
Wilhelmus, K.R. 8312.
Wilke, C.R. 864, 3386, 3474, 8541, 8660.
Wilkinson, R.R. 6536.
Wilkes, J. 364.
Wikie, A.C. 5360.
Wilkie, B.N. 4895.
Wilkins, B.M. 2486.
Wilkins, P.W. 1984.
Wilkins, R.M. 6295.
Wilkins, T.D. 1641.
Wilkinson, A.J. 8573.
Wilkinson, H.W. 732, 1656, 2512, 3301, 4196, 9291.
Wilkowski, C.J. 510.
Wilks, C.R. 7569, 9284.
Will, O.H. 111, 869.
Willer, D.W. 6847.
Willers, J.M.N. 542.
Willits, A. 5226.
Williams, A.G. 1634, 7507.
Williams, A.P. 195.
Williams, A.R. 7080.
Williams, B.J. 4741.
Williams, B.L. 5631, 7553, 8167.
Williams, D.H. 4066, 7463.
Williams, E.C. 3078.
Williams, E.N.D. 7630.
Williams, G.L. 6460.
Williams, G.R. 2723, 3005, 3646.
Williams, G.W. 1459.
Williams, H.N. 7450.
Williams, J. 8507.
Williams, J.D. 2234, 2250.
Williams, J.D. 4165.
Williams, J.H. 246.
Williams, J.K. 2451.
Williams, J.W. 6010.
Williams, L.A. 5297.
Williams, M.J. 1227, 8790.
Williams, M.V. 6845.
Williams, P.A. 1302.
Williams, P.E.V. 1920, 6148.
Williams, P.H. 1185, 1692, 2771, 2855, 8065.
Williams, P.M. 8242.
Williams, R.E. 5163, 6837.
Williams, R.J. 1950, 3829, 5430, 8994, 9059, 9082.
Williams, R.L. 571.
Williams, R.T. 2152.
Williams, S. 3015.
Williams, S.A. 2681.
Williams, T.N. 1458, 4403.
Williams, T.W. 4478.
Williamson, B. 8015.
Williamson, C.K. 888.
Williamson, F.B. 887.
Williamson, G. 3460.
Williamson, R. 4687.
Williamson, E.E. 6874.
Willis, G.K. 8765.
Willis, G. 1546.
Willis, K.H. 7098.
Willis, L. 2424.
Willkommen, H. 4993.
Willmer, N.E. 2639.
Willmann, R. 4769.
Wilm, K. 1338.
Wilson Schuster, G. 3085.
Wilson, B.H. 5814.
Wilson, C.B. 492.
Wilson, C.L. 8053, 8805.
Wilson, C.R. 6182.
Wilson, D.J. 2372.
Wilson, D.M. 1904, 8083.
Wilson, G. 1897, 2236.
Wilson, G.P.M. 294.
Wilson, H.W. 487, 501.
Wilson, J. 3239, 5551, 5556.
Wilson, J. 5459.
Wilson, J.M. 2124, 3360, 8972, 8973.
Wilson, J.T. 5814.
Wilson, J.W. 2146.
Wilson, K.E. 1427.
Wilson, K.H. 688, 1592, 2510.
Wilson, K.J. 5283.
Wilson, K.S. 7662, 7663.
Wilson, L.A. 7698.
Wilson, L.L. 8846.
Wilson, M.C. 8641.
Wilson, M.P. 9.J. 1303.
Wilson, R. 7121.
Wilson, S.C. 2008.
Wilson, U. 3837.
Wilson, U.E. 3859.
Wilt, J.C. 4478.
Wilterdink, J.B. 6649.
Wiltshire, C.W. 4387.
Windsels, C.E. 7967.
Windham, W.R. 7882.
Winer, G. 6712.
Winfrey, M.R. 8267.
Wingard, L.B. 4232.
Wingard, L.B., Jr. 850, 3379, 9341.
Wingender-Driess, R. 896, 933.
Wingender, J. 2570.
Winger, R.J. 3702.
Winkelmann, G. 2301, 9214.
Winkler, I. 3100.
Winkler, U.K. 2570.
Winn, C.D. 4143.
Winn, W.C., Jr. 7622.
Winsauer, K. 1395.
Winship, L.J. 4606.
Winston, S. 5390, 6619.
Winter, G.P. 8573.
Winter, H.C. 789.
Winter, P.A. 5649.
Wintersberger, U. 886.
Winwood, J. 1054.
Winzenburger, P. 1944.
Winzenburger, P.A. 1943.
Wirsing von Koenig, C.H. 5031.
Wirtz, G.H. 3704.
Wise, L.D. 3372.
Wise, J.G. 896.
Wise, R. 1431, 6448, 6454, 8343.
Wiseman, A. 5132.
Wiseman, J. 5351.
Wisniewski, P. 7589.
Wisniewski, Z. 7189.
Wiseman, C.L., Jr. 2326, 2471, 6495.
Worman, J.T. 871, 5114, 7831.
Workman, W.E. 8548.
Worobec, E.A. 6657.
Worrell, P. 6659.
Worth, R.M. 5901.
Worthing, D.M. 595.
Worthing, C.R. 8340.
Worthington, H.E.C. 9152.
Witte, L. 7777.
Witte, W. 7629.
Wittmann, H.G. 874.
Witty, F.J. 1277, 9258, 8582.
Wohlens, B. 6971.
Wohlflath-Buttermann, K.E. 5954.
Wohlfrabe, K. 9705.
Wojcik, K. 4702.
Wojtas-Wasilewska, M. 7754.
Wolf, A.D. 1666.
Wolf, H. 647.
Wolfe, M.S. 1191, 2861, 5422, 6791.
Wolfe, N.L. 1882.
Wolfe, R.L. 9246.
Wolfe, R.S. 2182, 4681, 8636.
Wolfe, S. 1819, 5776, 8353.
Wolff, E.T. 4445, 4478.
Wolfshohl, J.F. 3273.
Wolfson, J. S. 5797.
Wolkin, R.H. 3982.
Wolkowski, R.P. 8201.
Wollegahn, R. 8135.
Woloshuk, C.P. 2092.
Wolpert, T.J. 4519.
Wolter, K.E. 6820.
Wondrack, L. 109.
Wong-Kai-In, P. 9151.
Wong-Staal, F. 5884.
Wong, B. 1529.
Wong, D.C. 597.
Wong, D.T. 1565.
Wong, D.H.W. 6457.
Wong, H. 3386.
Wong, H.-C. 5251.
Wong, K. 509, 7588.
Wong, K.-H. 687.
Wong, L.K. 424.
Wong, N.P. 7011.
Wong, P.-K. 5972.
Wong, P.-K. 2372.
Wong, P.T.W. 294.
Wong, S. 7350.
Wong, T.K. 3388.
Wong, T.P. 3757.
Wong, W.K.R. 6018.
Wong, Y.H. 5459.
Wood, B.A. 6218, 8872.
Wood, B.J.B. 1305.
Wood, B.W. 5446.
Wood, D. 1865.
Wood, D.A. 1679, 6195.
Wood, G.W. 6856, 8453.
Wood, H.A. 6901.
Wood, H.G. 7698.
Wood, J.C. 1674, 3317.
Wood, J.M. 3304, 3408.
Wood, L.V. 437, 1961, 9309.
Wood, M. 7278, 7279.
Wood, R.K.S. 4493.
Wood, S.W. 538.
Wood, T. 5536.
Wood, T.M. 3666.
Wood, W.F. 4200.
Woodams, E.E. 5271.
Woodard, M. 2517.
Woodbury, C. 2209.
Woodcock, D. 8494.
Woodcock, P.M. 9265.
Woodford, J.A.T. 2065.
Woodford, L.C. 6680.
Woodgate-Jones, P. 5588.
Woodham, R.C. 8816, 4536, 8859.
Woodhead, S.H. 826, 5649.
Woodrow, J.R. 6019.
Woodruff, H.B. 8991.
Woods, A.E. 3489.
Woods, D.R. 3143, 7784.
Woods, R.D. 1141.
Woods, S.L. 6669.
Woods, T.A.D. 7237.
Woodside, R. 1342.
Woodward, B. 219.
Woodward, D.L. 725.
Woodward, J. 18, 3491, 5161.
Woodward, T.E. 2326.
Woodfenden, R. 2967.
Woo-Khoun, G. 7226.
Woolacott, B. 7957, 8788.
Woolcock, J.B. 3282.
Woolley, R.E. 4816.
Woolford, M.K. 5360, 6202, 6489, 6490, 7012, 7013.
Woolfrey, B.F. 479, 1408, 4714, 5778, 7586.
Worntmeyer, R. 5809.
Wopati, P.W. 5167.
Worren, R.M. 5262.
Worman, J.T. 871, 5114, 7831.
Workman, W.E. 8548.
Worobec, E.A. 6657.
Worrell, P. 6659.
Worth, R.M. 5901.
Worthing, D.M. 595.
Worthing, C.R. 8340.
Worthington, H.E.C. 9152.
Wouffe, S.R. 9206.
Wozniak, W. 7856.
Wrathall, A.E. 7487.
Wray, C. 3011.
Wray, L.V., Jr. 1315.
Wray, V. 3126, 7777.
Wright, A.E. 4933.
Wright, A.J. 504, 510.
Wright, B.A. 2393, 7560.
Wright, C.A. 4838.
Wright, C.T. 3716, 4457.
Wright, D.N. 3090.
Wright, H.M. 2236.
Wright, H.S. 665.
Wright, J.W. 778.
Wright, L.R. 1340, 5738.
Wright, M. 6633.
Wright, M.J. 8776.
Wright, N.S. 8881.
Wright, P. 1660.
Wright, C. 4784, 9300.
Wright, R.G. 2653.
Wright, R.L. 6672.
Wright, S.L.L. 4630.
Wright, S.L. 2732.
Wrynski, J. 340.
Wu, Y.-Y. 5806.
Wu, C.S. 5291.
Wu, D.H. 4801.
Wu, J.-H.D. 8381.
Wu, J.H. 8886.
Wu, J.K. 5480.
Wu, Q. 4995.
Wu, R. 738, 841, 842.
Wu, S.-H. 1346.
Wu, T.C. 2531.
Wuempelmann, M. 3613.
Wuensch, W.A. 5420.
Wurthele, W. 7222.
Wurthele, J. 1641.
Wuest, P.J. 4564.
Wukasch, R.F. 1035.
Wulff, J.J. 2730.
Wulff, H. 4196.
Wullenweber, M. 548, 4930.
Wundt, W. 7428.
Wurm, F. 6611.
Wutscher, H.K. 5439.
Wutzler, P. 464.
Wviorok, W. 5123.
Wyler, F. 6599.
Wyatt, R.D. 8727.
Wyatt, S.D. 1996.
Wyckoff, H.W. 2587.
Wyke, A.W. 5110.
Wyke, D.E. 2329.
Wyndham, R. 2981.
Wynn, E.C. 8141.
Wynn, W.K. 250.
Wynne, J.C. 242, 1171.
Wysocki, M. 118, 129.
Wyss, O. 4896.
Wyza, R.E. 5899.
Xavier, A.V. 7710, 7713.
Xerri, L. 8507.
Xia, Q.-C. 1085.
Xiang, X.-L. 2496.
Xiao, D.-H. 1948.
Xiao, D.H. 7905.
Xiao, J. 4995.
Xie, S.-W. 9324.
Xu, G.-Q. 9286.
Xu, H.-T. 7392.
Xu, H.-Z. 4996.
Xu, Q.-M. 7434.
Xu, S.-X. 7445.
Xu, X.-R. 7907.
Xu, Z. 6229.
Yaacob, O. 7260.
Yabu, K. 9097.
Yabuuchi, E. 3024.
Yadav, J.P. 1976.
Yadav, J.S. 7106, 7893.
Yadav, K.S. 8391.
Yadav, P.O. 4650.
Yadav, P.S. 8246.
Yadava, K.D.S. 9129.
Yadamae, I. 5202, 6891.
Yagi, H. 3201.
Yagi, T. 8543.
Yagita, A. 2273.
Yaguchi, M. 6874, 7728.
Yaguchi, S. 4543, 4545.
Yahia, H. 6670.
Yahia, E.M. 8057.
Yakko, D. 3287.
Yakko, D.M. 5540.
Yakhaeva, S.A. 6046.
Yakovlev, A.V. 3992.

Author Index

- Yakovlev, G.I. 5152.
- Yakovleva, E.P. 2318, 4970, 7672.
- Yakovleva, V.I. 5077, 6877, 7656.
- Yakovleva, Z.M. 7294.
- Yakusheva, D.D. 5136.
- Yakushiji, T. 8616.
- Yalcin, O. 337, 2078.
- Yamada, H. 4, 570, 586, 1817, 4264, 4268, 4329, 4822, 5623, 7678, 7716, 8591, 8628.
- Yamada, K. 570, 8371.
- Yamada, M. 4257, 5061.
- Yamada, N. 4372.
- Yamada, S. 37, 1756.
- Yamada, T. 3018, 3160.
- Yamada, Y. 1314, 3501.
- Yamagishi, H. 606.
- Yamaguchi, A. 2317, 3811, 4862.
- Yamaguchi, H. 6081, 7551.
- Yamaguchi, K. 3467, 7478.
- Yamaguchi, S. 7550.
- Yamaguchi, Y. 1128.
- Yamaki, H. 7468.
- Yamanoto, H. 206.
- Yamanoto, I. 4384.
- Yamanoto, K. 7, 228, 958, 1081, 3694, 6061, 6406, 8315.
- Yamanoto, M. 317, 6321.
- Yamanoto, M. A. 4706.
- Yamanoto, R. 3670.
- Yamanoto, T. 1733, 5128, 7120.
- Yamanoto, Y. 2535, 8570.
- Yamanaka, H. 7697.
- Yamanaka, K. 1776, 7692.
- Yamanaka, S. 67, 1128, 1705.
- Yamanaka, T. 2176.
- Yamashita, Y. 5990.
- Yamano, N. 3235, 9322.
- Yamane, T. 5104.
- Yamanishi, K. 8447.
- Yamano, H. 2150, 2933.
- Yamano, T. 891.
- Yamashuchi, T. 3160.
- Yamashita, A. 4569.
- Yamashita, I. 5155, 8570.
- Yamashita, K. 1449, 1953, 2709.
- Yamashita, M. 1434, 1435, 3103.
- Yamashita, N. 5165.
- Yamashita, T. 2555.
- Yamashoji, S. 7984.
- Yamatodani, S. 4384.
- Yamauchi, R. 5208, 6057.
- Yamazaki, Y. 9023.
- Yamazaki, H. 5037, 3684, 4333, 4389, 5142, 8516.
- Yamazaki, K. 1489.
- Yamazaki, M. 1489, 3567, 4472.
- Yamkovoy, V.I. 6003.
- Yan, L. 1907, 1910.
- Yan, Z.-L. 1431.
- Yanagihara, Y. 9321.
- Yanagishima, N. 3410.
- Yang, C.-C. 8518.
- Yang, C.-K. 1928.
- Yang, C.-M. 1928.
- Yang, C.-P. 8613.
- Yang, C.-H.J. 1489.
- Yang, C.P. 7679.
- Yang, C.S. 5561, 7637.
- Yang, J. 2376, 3542.
- Yang, J.S. 38.
- Yang, L. 6391.
- Yang, P.-Y. 7489.
- Yang, S. 3839.
- Yang, S.-K. 8433.
- Yang, S.K. 2188, 7835.
- Yang, S.M. 4551.
- Yang, S.S. 798, 800, 9304.
- Yang, T.-K. 9208.
- Yang, Z. 1088.
- Yanigo, B.-G. 7380.
- Yanina, M.M. 4313.
- Yankevich, N.B. 7689.
- Yano, Y. 70.
- Yanson, V.A. 5112.
- Yanornio, O. 7786.
- Yanulatiene, K.K. 7689.
- Yao, Z.-X. 1948, 7905.
- Yap, H.H. 123.
- Yaropolov, A.I. 927, 5982.
- Yarotsky, S.V. 8614.
- Yarovaia, S.M. 947.
- Yarovenko, V.I. 5112.
- Yarrow, D. 5285.
- Yartseva, I.V. 4031.
- Yasaki, H. 8875.
- Yasbin, R.E. 7471.
- Yashimura, M.A. 5450.
- Yasuda, K. 7108.
- Yasuda, M. 7384, 8593.
- Yasuda, N. 1398, 2288.
- Yasuda, T. 768, 2261, 3530.
- Yasuda, Y. 1553.
- Yasuhara, T. 2556, 8529.
- Yasui, T. 4295.
- Yasunobu, K.T. 910.
- Yasuka, N. 2625.
- Yata, N. 8627.
- Yatabe, T. 7674.
- Yatawara, C.S. 7895.
- Yatawara, M. 2098, 8147, 8148.
- Yates, J.R. 8262.
- Yates, R.A. 3414.
- Yavin, E. 7908.
- Yazawa, M. 8513.
- Yazdani, S.S. 7767.
- Yazicioglu, T. 1722.
- Ybarra, J. 1755.
- Yerlan, W.C. 135, 2659, 6892, 8645.
- Yeates, C. 5396.
- Yee, R.B. 1327.
- Yee, T. 4430.
- Yeh, S.-D. 8039, 8110.
- Yelenosky, G. 2805.
- Yello, J. 5000.
- Yen, R. 6037.
- Yen, T.M. 7679, 8613.
- Yen, T.F. 423, 3986.
- Yerushalmi, L. 976.
- Yerushalmi, L. 2572.
- Yeung, T.-C. 2312, 3053.
- Yevdokimova, G.A. 2142.
- Yeyssoglio, T. 4009.
- Yin, S.-Y. 8139.
- Yin, Y.-M. 3542.
- Yin, G.Y. 2842.
- Yilmao, A. 4114.
- Yoda, K. 89.
- Yoder, M. 8522.
- Yoder, O.C. 1981, 3365, 3805.
- Yoh, M. 228.
- Yohs, T.L. 7499.
- Yokel, B.J. 6713.
- Yokogawa, K. 5137.
- Yokomizo, Y. 3324.
- Yokosawa, H. 935.
- Yokose, K. 1445, 1447, 5794, 7478.
- Yokosaki, H. 5204.
- Yokota, S.-I. 5595.
- Yokota, T. 7120.
- Yokoyama, H. 4112, 6996.
- Yokoyama, I. 5993.
- Yokoyama, K. 7435.
- Yokoyama, M. 7700.
- Yokoyama, T. 1128.
- Yokozeki, K. 67, 3438.
- Yolken, R.H. 230, 724, 3243, 6216.
- Yomosa, K. 4397.
- Yon, J.M. 6007.
- Yon, J.S. 1297.
- Yonaha, K. 4290.
- Yonath, A. 874.
- Yoneda, K. 5903.
- Yonehara, H. 3532.
- Yoneyama, T. 7659, 8298.
- Yongazawa, H. 3142.
- Yong-Quin, C. 7673.
- Yong, D.C.T. 2454, 3316.
- Yongacoglu, S. 6703.
- Yoo, J.-K. 4378.
- Yoon, S.H. 970, 1856.
- Yoranci, U. 2018.
- Yorifuji, T. 4290.
- Yoshida, J. 2286.
- Yoshida, K. 8371.
- Yoshida, S. 2955.
- Yoshida, S.-I. 6506.
- Yoshida, T. 2290, 2994, 4824, 5964, 8236, 8503, 9023.
- Yoshida, Y. 905, 944, 945, 1466.
- Yoshihara, O. 1761.
- Yoshii, Z. 1373.
- Yoshikawa, M. 2075.
- Yoshimi, M. 6550.
- Yoshimoto, T. 6033.
- Yoshimura, A. 6298.
- Yoshimura, S. 9198.
- Yoshimura, Y. 4848.
- Yoshino, H. 1799, 2574, 4451.
- Yoshino, S. 6150.
- Yoshioka, H. 3501.
- Yoshioka, I. 606.
- Yoshioka, K. 517, 4416, 4420.
- Yoshioka, M. 6521.
- Yoshioka, T. 2300, 7460.
- Yoshioka, Y. 3695.
- Yoshizawa, T. 1930, 2737.
- Yotis, E. 6806.
- Yotis, W.M. 6806.
- Yotsuji, A. 879, 2261.
- Younas, O. 3520.
- Young, C.R. 1980.
- Young, D.H. 3796.
- Young, D.J. 8044.
- Young, F.E. 735, 7471.
- Young, J.C. 1476, 3557, 7890.
- Young, J.D. 4888.
- Young, L.G. 872.
- Young, L.H. 219.
- Young, L.H. 6313.
- Young, L.S. 7429, 7442.
- Young, L.Y. 7830.
- Young, P.M. 5762.
- Young, P.R. 6642.
- Young, R.H. 1138.
- Young, S.Y. 135, 2659, 6892, 8645.
- Yount, T. 740.
- Yountgust, R.S. 2253.
- Younts, E.R. 6402.
- Youtsee, D.M. 223.
- Yousef, A.E. 217, 3745.
- Youssef, A. 7078, 7081.
- Youstean, A.A. 2663.
- Youtsey, C.O. 1219.
- Yu, C.-A. 3406.
- Yu, E.K.C. 5220, 5274, 8632.
- Yu, H.-S. 1010, 2705.
- Yu, L. 3406.
- Yu, R.S.-T. 5952, 8702.
- Yu, S.-R. 2496.
- Yu, S.P. 3542.
- Yu, V.L. 3091, 4203, 5854, 7528, 8357, 9251.
- Yu, X.-Q. 8479.
- Yu, Y.-X. 1451.
- Yu, Y.N. 389.
- Yuan, Y.-X. 3542.
- Yuan, Z. 71, 81.
- Yudaev, A.P. 4044.
- Yudina, T.G. 918, 1818, 6029.
- Yuen, G.Y. 2842.
- Yuen, J.E. 3841.
- Yufera, E.P. 8231.
- Yuli, T.M. 9277.
- Yulm, M. 3235, 9322.
- Yun, W.J. 7015.
- Yunmto, N. 1788.
- Yun, S.-E. 205.
- Yunus, M. 2836.
- Yuo, H. 506.
- Yuovalkite, D.Yu. 2571.
- Yurchenko, V.S. 881, 4301.
- Yurkowiak-Horvath, K. 8601.
- Yus, M. 5842.
- Yusof, Z.A.M. 8663.
- Yustratova, L.S. 7455.
- Yusupova, I.Kh. 1889.
- Yusupova, M.P. 5136.
- Yvon, M. 7097.
- Zabirova, R.M. 7311.
- Zabriski, D.W. 8475.
- Zachariuk, R.M. 2058.
- Zachry, G.S. 3491.
- Zackrisson, G. 3088.
- Zadoks, J.C. 2865, 7959.
- Zadrazil, F. 1887.
- Zaehner, H. 4065, 4873, 6043, 8382.
- Zafiri, D. 1421.
- Zagari, G.P. 5153.
- Zagory, D. 8319.
- Zagrebelsky, S.N. 4338.
- Zagustina, N.A. 6875.
- Zaharieva, T.D. 7959.
- Zaher, M.R. 9134.
- Zahradni, J. 7671.
- Zaka, L.L. 4723.
- Zainal, A.S. 1024.
- Zaiter, H.Z. 5406.
- Zaitlin, M. 1099.
- Zaitsev, G.M. 6954.
- Zaitseva, M.P. 4898.
- Zaitseva, N.I. 963, 4380, 5210, 6095, 7779.
- Zaitseva, Z.M. 857, 3436.
- Zajac, I. 701.
- Zajac, M. 1912.
- Zajceva, Z.M. 886.
- Zajdel, J.K. 2311.
- Zajic, J.E. 3006, 4392, 7776, 8629.
- Zak, A.F. 493.
- Zak, J.C. 8230.
- Zak, O. 9088, 9089.
- Zakharova, I.Ya. 914, 4337, 7732.
- Zakharova, M.S. 9323.
- Zaki, D. 422.
- Zaki, F.N. 117, 128, 8648.
- Zakirov, M.Z. 6872, 7008.
- Zakm, V.I. 6585.
- Zakomyrdin, A. 8435.
- Zakordonets, L.A. 860.
- Zakrzewski, K. 9175.
- Zaks, A.M. 5144, 5997.
- Zakstelskaya, L.Ya. 1704.
- Zalashko, M.V. 5239.
- Zali, R.R. 2684, 2689, 6812.
- Zalman, L.S. 5556.
- Zamani, B. 6347.
- Zambolin, L. 240.
- Zambonelli, C. 5268.
- Zambre, M.A. 7277.
- Zamorani, A. 6876, 8600.
- Zampieri, A. 4940.
- Zarnetcos, C.A. 6865.
- Zanuso, G. 1402.
- Zanuta, M. 9279.
- Zarini, F. 534.
- Zarkower, P.A. 4564.
- Zartarian, M. 1674.
- Zartarian, M.V. 3317.
- Zaslavsky, P.L. 7469.
- Zasoski, R.J. 5574.
- Zavadova, H. 4076.
- Zavalnyi, M.A. 2433.
- Zavate, O. 2409.
- Zavgorodny, S.G. 2192, 2193.
- Zaslavsky, A.I. 477.
- Zavoronov, V.V. 1607.
- Zawdzki, Z. 2191.
- Zawodny, P.D. 6064.
- Zaykina, I.V. 2572.
- Zdarsky, J. 8526.
- Zeb, M. 6806.
- Zecconi, A. 7892.
- Zedan, H.H. 7062, 7091.
- Zee, Y.C. 3244.
- Zehnder, A.J.B. 3661.
- Zelders, E.C. 2794.
- Zeldier, C.S. 6185.
- Zeliger, E. 5915.
- Zeikus, J.G. 769, 3521, 3982, 5312, 6135, 8646.
- Zeiss, C.R. 6773, 7590.
- Zeltinger, J.R. 3077.
- Zelichowska, M.G. 6365.
- Zeller, W. 343.
- Zelwer, C. 2621.
- Zeman, R. 778.
- Zemcov, S.J.V. 4809.
- Zemelman, R. 433.
- Zemskov, A.M. 9326.
- Zernikov, M.V. 9326.
- Zeng, Y. 81, 4992.
- Zennie, T.M. 8726.
- Zentmyer, G.A. 2798, 2809.
- Zernov, Yu.P. 4338.
- Zemskov, A.M. 9326.
- Zether, O. 6079.
- Zettersten, U. 4139.
- Zevenhuizen, L.P.T.M. 5199.
- Zeylski, J. 1041, 6157.
- Zeizin, A.B. 1769.
- Zhang, B.-X. 2496.
- Zhang, B.-X. 2607.
- Zhang, G.S. 3743, 8757.
- Zhang, L.-G. 4992.
- Zhang, L. 1346.
- Zhang, Q. 506.
- Zhang, Q.-F. 7564.
- Zhang, S.Z. 77, 78.
- Zhang, V.S. 2111.
- Zhang, W.-P. 7182.
- Zhang, X.-C. 8716.
- Zhang, X.-L. 7838.
- Zhang, X.-T. 4935.
- Zhang, Z.-X. 4027.
- Zhang, Z.-Z. 8189.
- Zhao, J.-M. 5388.
- Zhao, K. 7485.
- Zhao, L. 3542.
- Zhao, Z.-C. 7434.
- Zharukova, L.D. 3253.
- Zhu, K.Y. 892.
- Zhavrd, S.V. 4764.
- Zhdanov, V.M. 2193, 2328.
- Zhdanova, L.P. 7405.
- Zheng, Q.-X. 7182.
- Zheng, S.-L. 7445.
- Zherobstov, A.A. 4321.
- Zhilina, T.N. 963, 6095.
- Zhitlova, N.A. 6294.
- Zhibba, N.M. 920.
- Zhong, W.-B. 473.
- Zhou, F. 8324.
- Zhou, G.-H. 8796.
- Zhou, J.-G. 404.
- Zhou, Y.M. 892.
- Zhu, C.-R. 8358.
- Zhu, G.-F. 5029.
- Zhu, J.-Y. 7392.
- Zhu, P.-K. 1147.
- Zhu, T. 1163.
- Zhu, Zh.-G. 7445.
- Zhuang, W.Y. 369.
- Zhukova, I.G. 7355.
- Zhukova, R.A. 7411.
- Zia-ur-Rehman 3673.
- Zibitske, M.L. 7494.
- Zieger, A.R. 3344.
- Ziegler, J.S. 4639.
- Ziegler, E. 7941.
- Zielsen, J. 2303.
- Zielke, R. 7999, 8466, 8869.
- Zienal, B. 7094.
- Zierdt, C.H. 786, 1633.
- Zieve, R. 7261.
- Ziffer, H. 5249.
- Ziffer, J. 2677, 2678.
- Zikmundova, V. 5715.
- Zilberstein, Y. 2023.
- Zilkken, F. 3515.
- Zimmerman, E.R. 6728.
- Zimmerman, S.B. 6562.
- Zimmermann, A. 3809.
- Zimmermann, G. 5232.
- Zimmermann, T. 8718.
- Zimmermann, W. 6771, 8852.
- Zimchenko, O.N. 8679.
- Zinder, S.H. 3980, 3981, 7524.
- Zingaretti, A. 9160.
- Zink, F.W. 313.
- Zinner, S.H. 6435, 6504.
- Ziobro, G.C. 5297.
- Zioemek, E. 5163, 6837.
- Zippel, C. 591, 5878.
- Zippel, M. 3147.
- Zirmgib, L. 6311.
- Zissis, G. 3177.
- Zissis, N.P. 4807.
- Zitko, V. 7822.
- Zitter, T.A. 8909.
- Ziv, O. 291.
- Zlamalova, J. 6961.
- Zlattnier, L. 5540.
- Zmiejewski, J.R. 2640.
- Zocca, A. 7878.
- Zoccarato, I. 7875.
- Zocher, R. 3132, 7780, 8379.
- Zoellner, R. 4796.
- Zoganias, H. 6512.
- Zohary, D. 5415, 5496, 7209.
- Zolotukhina, L.M. 1005, 4432.
- Zomer, E. 2672, 3543.
- Zoon, K.C. 9111.
- Zopf, D.A. 1830.
- Zolova, E.E. 3583.
- Zoruri, M. 8038.
- Zsida, J. 1706, 2245.
- Zubenko, T.F. 6872.
- Zuber, M.S. 6204, 8724.
- Zuckerman, A.J. 6642.
- Zueger, M.F. 7768, 8654.
- Zueva, V.S. 9070.
- Zukowska, Z. 2139.
- Zun, C.L. 892.
- Zuravleff, J.J. 4203, 8357.
- Zurenko, G.E. 6543, 9140.
- Zurkova, E. 778.
- Zuyeva, L.D. 1279, 1603.
- Zvyagintsev, D.G. 1272, 8233, 9042.
- Zwaz, V.B. 6244.
- Zwick, T.C. 3951, 8257.
- Zygraich, N. 3177.

Subject Index

- Abaca mosaic virus**, disease transmission, vectors, *Aphis gossypii*, *Musa textilis* 6276.
- Abattoirs**, activated sludge, nutritive value, chickens 7015.
- airborne bacteria** 1504.
- bacteria enumeration**, counting methods 4202.
- effluents**, wastewater treatment, activated sludge, kinetics 6667.
- effluents**, wastewater treatment, dissolved oxygen, activated sludge 6668.
- Abelmoschus esculentus**, growth, yield, okra mosaic virus, inoculation time effects on 7167.
- Abies**, *Scolytus ventralis* attack, association wetwood, bacteria 5585.
- Abies alba**, leaves, biodegradation, microorganisms 181.
- white rot**, spatial distribution, annual rhythms, *Collybia butyracea*, *Collybia maculata* 4616.
- Abies balsamea**, forests, *Bacillus thuringiensis*, biological control, *Choristoneura fumiferana* 7778.
- soil nitrification**, methanol extracts inhibition, proteins binding effects on, sub-alpine environments 2909.
- soil, nitrification**, phenols inhibition, sub-alpine environments 2908.
- Abies concolor**, inoculum, *Pisolithus tinctorius*, spores 5579.
- roots**, *Pisolithus tinctorius* spores inoculation, seedlings survival 5607.
- Abies fraseri**, root rot, *Phytophthora cinnamomi*, flooded soils effects on pathogenesis 5610.
- seedlings**, ectomycorrhizas, metalaxyl effects on growth 1234.
- seedlings**, survival, overwintering, *Phytophthora cinnamomi* 1235.
- Abies magnifica var. shastensis**, inoculum, *Pisolithus tinctorius*, spores 5579.
- roots**, *Pisolithus tinctorius* spores inoculation, seedlings survival 5607.
- Abies pinsapo**, *Rhizophsphaera oudemansii* needlecast, pathogenesis 5608.
- rot**, *Aphylophorales* fruit bodies 5611.
- Abortiporus biennis**, wastewater treatment, rotating discs, industrial effluents 2341.
- Abrasion**, dental manipulation, pumice, *Acinetobacter* contamination 7540.
- Abiotic acid**, localization, *Alnus glutinosa* nodules, actinorrhizas 346.
- tobacco mosaic virus infectivity**, *Chenopodium amaranticolor* 2044.
- Abdelida coerulea**, compactin hydroxylation 519.
- fermentation**, chitosan production 6889.
- Abutilon**, plant diseases, abutilon mosaic virus, seasonal variations, chloroplasts ultrastructure 4541.
- Abutilon hirtum**, plant diseases, okra mosaic virus, epidemiology, Nigeria 6262.
- Abutilon mosaic virus**, cytopathology, Malvaceae 8815.
- plant diseases**, Abutilon, seasonal variations, chloroplasts ultrastructure 4541.
- Abutilon sallowianum**, cytopathology, abutilon mosaic virus 8815.
- Acacia**, rust, fungi indigenous species, Hawaii 7236.
- Acacia dealbata**, nitrogen fixation, nitrogen-15, acetylene reduction, hydrogen gas production, environmental chambers 2986.
- seedlings**, nodules, nitrogen fixation, *Rhizobium* 2906.
- Acacia holosericea**, growth, *Rhizobium*+*Glomus mosseae*, symbiosis, effects on 8969.
- growth stimulation**, inoculation, *Rhizobium*+*Glomus mosseae* 6355.
- Acacia raddiana**, growth stimulation, inoculation, *Rhizobium*+*Glomus mosseae* 6355.
- Acacia reddiana**, growth, *Rhizobium*+*Glomus mosseae*, symbiosis, effects on 8969.
- Acantamoeba polyphaga**, in situ freeze-thawing effects on soil microorganisms 4638.
- media (enrichment)**, *Legionella pneumophila*, host-pathogen interactions, isolation methodology 2485.
- Acanthamoeba**, infestation, pest control, fruit bodies production, culture, *Basidiomycetes* 7855.
- Acariacides**, antifungal activity, powdery mildew, *Erysiphe pisi*, pathology, *Lens culinaris* 8917.
- Acetabularia**, inoculum production, reviews 826.
- population levels**, roots colonization, plantations, *Coffea arabica* 5626.
- Acetabularia laevis**, identification, use, fluorescent antibody test 3360.
- soil survival** 5644.
- spore germination**, hyphae growth, temperature effects on 402.
- Acetabularia spinosa**, roots, comparison, vesicles, use, inoculum 2153.
- Acetophate**, effects on, *Chromobacterium lividum*, nutrient uptake 640.
- Acet pseudoplatanus**, sooty bark, *Cryptosporium corticale*, population structure, life cycle, epidemiology, strains compatibility 8190.
- Acet pseudoplatanus**, phylloplane, microflora succession 8936.
- protoplasts**, fusococcin effects on pH 7110.
- roots**, nutrient flow, carbon sources, phosphate, mycelia, vesicular-arbuscular mycorrhizas 5555.
- Acet saccharinum**, lignocelluloses, biodegradation, *Cyathus*, *Crucibulum laeve*, *Nidula niveo-tomentosa* 6948.
- Acer saccharum**, canker, *Eutypella parasitica*, pathology, economic importance, Canada 8179.
- forest products**, defects, association, canker, *Eutypella parasitica* 8180.
- live roots**, biodegradation, soil microorganisms 6322.
- Acetaldehyde**, analysis, *Streptococcus lactis*, acetaldehyde 2,4-dinitrophenylhydrazone measurements, high-performance liquid chromatography 6927.
- by-products**, pyruvate decarboxylase catalysis, pyruvic acid, chromatography use, *Saccharomyces cerevisiae* 7721.
- production**, ethanol conversion, *Candida utilis* 3684.
- production**, ethanol conversion, *Candida utilis* 4389.
- Acetaldehyde 2,4-dinitrophenylhydrazone**, measurements, acetaldehyde analysis, high-performance liquid chromatography, *Streptococcus lactis* 6927.
- Acetate kinases**, immobilized enzymes, NADP production, ATP recycling 143.
- Acetic acid**, acid production, soil microorganisms, straw decomposition, ash, stabilization, soil properties 7300.
- biosynthesis**, enzymes levels, *Clostridium acetobutylicum* 859.
- biosynthesis relationship**, methanogenesis pathways, methanogenic bacteria 1295.
- conversion**, methanogenesis, immobilized cells, supports 7304.
- conversion**, methanogenesis, kinetics, bioreactors 3979.
- conversion**, methanogenesis, mixed culture, methanogenic bacteria, hydrogen bacteria 3984.
- digestion (anaerobic)**, methanogenesis, inhibition, 2-bromoethanesulfonate 7524.
- esters**, production, acetyl-CoA levels, wort fermentation, *Saccharomyces cerevisiae* 4416.
- esters**, production, wort fermentation, *Saccharomyces uvarum* 4420.
- fermentation**, kinetics, methanogenesis, methanogenic bacteria 3002.
- glucose**, bicarbonate, effects on, digestion (anaerobic), waste treatment 3191.
- incorporation**, *Aspergillus parasiticus* aflatoxins, association antifungal agents 217.
- nutrient requirements**, wastewater treatment, ozonation, *Spirillum* 4121.
- production**, cellulose fermentation, *Clostridium* 6150.
- production**, cellulose fermentation, *Clostridium acetobutylicum* 5111.
- production**, cellulose fermentation, *Clostridium thermocellum* 5969.
- production**, *Clostridium thermoaceticum* immobilized cells 4270.
- production**, enzymes metabolism, *Clostridium acetobutylicum* 5113.
- production**, extraction, *Clostridium thermoaceticum* 3414.
- production**, fermentation, lactic acid bacteria 5240.
- production**, petrochemicals, biomass 3372.
- radioactive labelling**, scytalone biosynthesis, *Phialophora lagerbergii* 7785.
- steroids**, *Streptomyces albus* fermentation 6049.
- Acetic acid bacteria**, fermentation, wine, *Phoenix dactylifera* 5288.
- musts**, malolactic fermentation, ethanol fermentation 6936.
- succession**, wine fermentation, storage 6134.
- Acetivibrio cellulolyticus**, cellulose fermentation 172.
- +Desulfotribio+Methanosarcina barkeri** mixed culture, cellulose degradation, methanogenesis 2186.
- Acetobacter aceti**, acetic acid bacteria succession, wine fermentation, storage 6134.
- alcohol dehydrogenase activity**, measuring techniques 5112.
- vinegar production**, sap fermentation, *Nypa fruticans* 6999.
- Acetobacter aceti subsp. xylinum**, endodeoxyribonuclease, purification, characterization, nucleotide sequence cleavage 3501.
- Acetobacter pasteurians**, acetic acid bacteria succession, wine fermentation, storage 6134.
- Acetobacter peroxidans**, lactate oxidase, purification, immobilization, lactic acid bioassays 3447.
- Acetobacter woodii**, mixed culture, methanogenic bacteria, immobilized cells, methanogenesis, sucrose conversion 2182.
- rRNA**, comparison methodology 2513.
- Acetogenium kivui**, +*Clostridium thermocellum* mixed culture, cellulose fermentation 8671.
- Acetoin**, by-products, pyruvate decarboxylase catalysis, pyruvic acid, chromatography use, *Saccharomyces cerevisiae* 7721.
- flavor compounds**, production, dairy industry, immobilized cells, *Streptococcus lactis* subsp. diacetylactis 6992.
- production**, fermentation, lactic acid bacteria 5240.
- Acetolactate decarboxylase**, *Lactobacillus casei*, use, yeasts brewing, beer maturation 7800.
- Acetolactate synthase**, purification, physicochemical properties, *Escherichia coli* 1795.
- Acetone**, biosynthesis, enzymes levels, *Clostridium acetobutylicum* 859.
- butanol production**, *Clostridium acetobutylicum* 142.
- Clostridium acetobutylicum* production**, mathematical models 976.
- fermentation**, glucose effects on, batch culture, *Clostridium acetobutylicum* 3545.
- fermentation**, inhibition levels, *Clostridium acetobutylicum* 962.
- levels**, measuring techniques, gas chromatography, fermentation, *Saccharomyces cerevisiae* 3581.
- production**, bioreactors, *Clostridium acetobutylicum* 5244.
- production**, *Clostridium acetobutylicum* 5237.
- production**, continuous culture, *Clostridium acetobutylicum* 961.
- production**, crop residues fermentation, *Clostridium acetobutylicum* 7832.
- production**, fermentation, *Clostridium acetobutylicum* 140.
- production**, glucose fermentation, batch culture, *Clostridium acetobutylicum* 4383.
- production**, immobilized cells, reviews 3575.
- production**, pentoses conversion, bacteria 3598.
- production**, petrochemicals, biomass 3372.
- production**, sporulation relationship, *Clostridium acetobutylicum* 7784.
- production**, whey conversion, *Clostridium acetobutylicum* 4381.
- production**, whey fermentation, *Clostridium acetobutylicum* 3546.
- recovery systems**, *Cephalosporium cormoidei*, fouling 7525.
- role**, *Rhizoctonia solani* growth inhibition 1337.
- use**, extraction lipids, *Acholeplasma laidlawii*, association, freezing 9314.
- Acetonitrile**, biodegradation, nitrilase, amidase, *Brevibacterium* 3665.
- Acetonyl p-hydroxybenzoate**, antibacterial activity 6464.

- 6-Acetyl penicillanates**, synthesis, oxidizing agents, stereoselectivity 6538.
- Acetyl salicylate**, antibacterial activity 6464.
- 6-Acetyliden penicillanates**, synthesis, oxidizing agents, stereoselectivity 6538.
- Acetyl-CoA**, levels, acetic acid esters production, wort fermentation, *Saccharomyces cerevisiae* 4416.
- Acetyl-CoA acetyltransferase**, *Klebsiella pneumoniae*, activity, bioassays, characterization 8612. purification, ion-exchange chromatography, *Clostridium kluyveri* 8588.
- N-Acetyl-muremyl-L-alanyl-D-isoglutamine**, adjuvants, *Corynebacterium diphtheriae* synthetic peptides, antigenicity, vaccines, mice 6656. vaccines development 8388.
- 2-Acetylaminofluorene**, enhancement, fluorescent probes, methodology, hybridization analysis, DNA, cytomegalovirus (human) 9282.
- Acetylarnotin**, plants growth regulators, structure, biosynthesis, *Aspergillus terreus* 2668.
- Acetylation**, activation aspartate ammonia-lyase, *Escherichia coli* 1788.
- Acetyloxyvinyleneol**, biosynthesis, *Fusarium solani* var. *coeruleum*, potatoes 5372.
- Acetylene**, concentrations, acetylene reduction measurement, *Glycine max* nodules, nitrogen fixation 7293. inhibition, hydrogenase, activity, *Azospirillum brasilense* 8585. initiation, nitrogenase activity, *Rhizobium*, oxygen diffusion, nodules, *Leguminosae* 8252. production, microorganisms 8265.
- Acetylene reduction**, biotyping, *Frankia*, actinorhizae, relationship nodulation, *Alnus glutinosa* 8157. effects on, nitrogen sources, carbon sources, bioassays, bacteria 7614. measurement, acetylene concentrations, *Glycine max* nodules, nitrogen fixation 7293. measurement, *Oryza sativa* roots, nitrogenase activity, diurnal variation, seasonal variations 5674. nitrogen fixation, environmental chambers, *Leguminosae* 2986. nitrogen fixation, ethylene release, soil, peat, Finland 4651. nitrogen fixation, indicators, ureides levels, *Glycine max* 2164. nitrogen fixation, nitrogenase, measuring techniques, nodules, actinorhizae, *Alnus incana* 8153. nitrogen fixation, relationship ureides levels, environmental factors, *Glycine max* 2162. nitrogen fixation, *Rhizobium*, nitrogen-15, environmental chambers, *Trifolium subterraneum* 2985. nitrogen fixation, *Rhizobium*, varieties, *Vigna unguiculata* 4645. nitrogen-fixing bacteria, soil, litter, forests, *Eucalyptus obliqua*, *Pinus radiata* 8937. nitrogenase mutants, iron protein, molybdenum-iron protein, *Klebsiella pneumoniae* 2612. nitrogenase, oxygen effects on, *Rhizobium* bacteroids, nodules, *Vigna unguiculata*, *Arachis hypogaea* 7291. nitrogenase, seasonal variations, actinorhizae, relationship reproductive organs growth, *Alnus glutinosa* 8155. *Rhizobium* meliloti, nitrogen fixation, *Medicago* 4666. *Rhizobium* mutants, *Glycine max* 2989.
- α-N-Acetylgalactosaminidase**, detection, color, agar, *Clostridium paraputrificum* recombinants, screening 1755.
- 1-Acetylisoquinoline**, thiosemicarbazones, antibacterial activity, Enterobacteriaceae, *Staphylococcus aureus*, *Neisseria* 7372.
- 3-Acetylisoquinoline**, thiosemicarbazones, antibacterial activity, Enterobacteriaceae, *Staphylococcus aureus*, *Neisseria* 7372.
- 6-Acetylthienepenicillanic acid**, antimicrobial activity, *Escherichia coli*, association, stability 1399.
- Acetylpolymers**, polyamine oxidase oxidation, extracellular enzymes, *Penicillium* 932.
- 2-Acetylpyrimidine**, thiosemicarbazones, antibacterial activity, Enterobacteriaceae, *Staphylococcus aureus*, *Neisseria* 7372.
- 2-Acetylquinoline**, thiosemicarbazones, antibacterial activity, Enterobacteriaceae, *Staphylococcus aureus*, *Neisseria* 7372.
- Acetylsalicylic acid**, disease control, *Agrobacterium tumefaciens*, crown gall, *Nicotiana tabacum* 7217.
- D-Acetylserine (thiol)-lyase**, purification, characterization, *Bacillus sphaericus* 4329.
- Acetyltransferase**, *Staphylococcus aureus*, *Staphylococcus epidermidis*, clinical isolates, purification, characterization, role, antibiotic resistance 5165.
- Achaea janata**, larvae, mortality, exotoxins, *Bacillus thuringiensis* 1852.
- Achlya flagellata**, antifungal activity screening, aquatic environment fungicides 2893.
- Achlya racemosa**, antifungal activity screening, aquatic environment fungicides 2893.
- Achloleplasma**, antibacterial activity, herbicolin A 9214.
- Achloleplasma laidlawii**, deoxyuridine triphosphatase, purification, characterization 6845. freezing, association electron microscopy, methanol, acetone, use, extraction, lipids 9314. phosphatase, denaturation, renaturation, electrophoresis 7707.
- Achromobacter**, biodegradation, 4-chlorobiphenyl 5304. manganese removal, ores 1287. *N*-acetylmethanesulfonate, metabolism, conversion 1284. PCB biodegradation, reviews 7827.
- Achromobacter delticatus**, cell culture methodology, association, polysaccharides production 114.
- Achromobacter pestifer**, hypochlorous acid, chlorine dioxide, antibacterial activity, models, in vitro
- Achromobacter pestifer**, (continued) 8721.
- Achromobacter xylosoxidans**, nosocomial infection isolates, fatty acid composition, antibiotic sensitivity testing 4789.
- Achromopeptidase**, cytotoxicity, gram-positive cocci, methodology 1578.
- Acid phosphatase**, activity, endomycorrhizae, *Epidendrum ibaguense* 8199. extracellular enzymes, propylene phenoxetol inhibition, *Propionibacterium acnes* 4725. inhibitors production, *Aspergillus*, *Penicillium* 917. microorganisms, stimulation, Lumbricidae activity, activated sludge 7265. purification, kinetics, *Capnocytophaga ochracea* 2568. purification, *Rhodotorula glutinis* 5123.
- Acid production**, acetic acid, soil microorganisms, straw decomposition, ash, stabilization, soil properties 7300. dairy starters, strains synergism, cheese 7866. detection, oxidation fermentation media, *Neisseria*, *Branhamella catarrhalis* 1658. fluoride, effects on, streptococcus mutants, dental plaque 7554. lactic acid bacteria, silage fermentation, *Zea mays* 7873. methanogenesis, anaerobic conditions, wastewater treatment, industrial effluents 9227. methanogenesis, straw, lignocelluloses, sodium hydroxide hydrolysis 9032. temperature tolerance, dairy starters, lactic acid bacteria 8187.
- Acid rain**, anions effects on soil microorganisms heterotrophy 2939. effects on soil microorganisms growth, heterotrophy 2940. Lycopersicon esculentum, speck, *Pseudomonas syringae* pv. *tomato* 4554. pollution effects, nitrification, denitrification, soil microorganisms 8245. pollution effects, plant diseases, pathogens 7920.
- Acidification**, effects on, bacteria growth, spoilage, textured soy protein, beef, minced meat 8987.
- Acidity**, gramicidin S, water chemistry 6577. mitomycin, physicochemical properties 1840. soil, effects on *Vigna unguiculata* nodulation, *Rhizobium* 8993. soil, sand, dunes, coastal environments, sulfur oxidation 8968.
- Acidogenic bacteria**, starter cultures, meat production 5322.
- Acidophilic bacteria**, thermophilic bacteria, minerals sulfide oxidation 416.
- Acids**, drainage, mines, pollution effects, leaf litter decomposition, reservoirs, bacteria 4429. hydrolysis, wood, sugars fermentation, ethanol production 7814. inactivation, spore germination, *Bacillus*, *Clostridium*, food, reviews 7026. organic compounds, wine, effects on fermentation, microorganisms 8672. pretreatment, wood, hydrolyzates, fermentation, 2,3-butanediol, butanol, production, *Clostridium acetobutylicum*, *Klebsiella pneumoniae* 5220. treatment, effects on hydrophobicity, ultrastructure, endotoxins, *Salmonella* *minnesota* 4476. *Trichoderma viride*, cellulase, biodegradation, *Triticum aestivum*, straw 6166.
- Acinetobacter**, alicyclic ring biodegradation, reviews 8277. antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 6465. aromatic compounds biodegradation, pathway characterization, plasmids genetic control, reviews 8279. biodegradation, aromatic compounds + halogens, mechanisms, reviews 7826. ceftriaxone antibacterial activity, agar diffusion test 1392. clinical isolates, antibacterial activity, aminoglycoside antibiotics 7444. clinical isolates, antibacterial activity, bactericidal activity, dibekacin, gentamicin, tobramycin 6540. contamination, pumice, dental manipulation, abrasion 7540. identification, AutoMicrob test 1645. netilmicin sensitivity 6401. PCB biodegradation, reviews 7827. phenols biodegradation, industrial effluents isolates 8685. reactors, cutting fluids biodegradation, bacteria identification 178.
- Acinetobacter calcoaceticus**, α-alga, biodegradation, octane 2151. antibiotic synergism, antibacterial activity, clavulanic acid, sulbactam 4792. cell adhesion, polystyrene, olive oil effects on 776. cell adhesion, biosynthesis 3552. emulsifier biosynthesis 3552. growth characterization, cells partition, hydrocarbons metabolism 3006. hydrocarbons metabolism, surfactants production, surface activity 8629. membrane proteins, aldehyde dehydrogenase purification, characterization, reconstitution 4296. role, extracellular cell membranes, particles, nutrient uptake, hydrocarbons 7308.
- Acinetobacter calcoaceticus subsp. anitratus**, antibacterial activity, apacillin, comparison, piperacillin, carbenicillin 6527. petroleum biodegradation 3985. petroleum biodegradation 4682.
- Acinetobacter lwoffii**, plasmids, role hydrocarbons oxidation, wastewater treatment 7309.
- Acilacinomycin A**, binding, DNA, physicochemical properties 956. inactivation, phase λ, phage ΦX174, characterization 1351. *Streptomyces galliae*, biosynthesis, acilacinomycin B conversion 953.
- Acilacinomycin B**, *Streptomyces galliae*, conversion, acilacinomycin A biosynthesis 953.
- Acrymyn**, *Streptomyces*, antifungal activity, *Helminthosporium oryzae*, *Curvularia lunata* 4689.
- Acronitase hydratase**, formation, 2-ketoglutarate regulation, *Bacillus subtilis* 4281.
- Acquired immune deficiency syndrome**, blood transfusion, disease transmission, identification, radioimmunoassay, methodology, man 646.
- Acromonium**, growth conditions, meat, food contamination 6193.

- cremonium chrysogenum**, cephalosporin C production, association arthrospores 4829.
- cremonium coenophialum**, infection, *Festuca arundinacea* seed treatments, fungicides, disease control 1227.
- infection, *Festuca arundinacea*, transmission (seed) 8790.
- cremonium zonatum**, antifungal activity, aromatic compounds, storage cells, leaves, role disease resistance, *Eichhornia crassipes* 8813.
- host-pathogen interactions, leaves penetration, biological control, *Eichhornia crassipes* 8827.
- criddlein**, combustion products, phase P22 mutagenicity testing, *Salmonella typhimurium* 3331.
- crinine orange**, mutagenesis, ethanol production, *Zymomonas mobilis* 5267.
- staining, bacteria, blood culture 703.
- staining, blood culture, diagnosis, septicemia 3342.
- staining, detection, bacteria, blood culture 672.
- use, bacteremia diagnosis, blood culture analysis 1667.
- use, detection, positive blood culture 3267.
- crithrin**, glucose isomerase production, *Streptomyces fradiae* 8598.
- induction mutation, *Aspergillus flavus*, characterization, effects on aflatoxins biosynthesis 7084.
- crosporiom**, powdery mildew, *Ipomoea fistulosa*, new records, India 2038.
- crystic acid**, derivatives, structure-activity relationships, disinfectants, antibacterial activity, gram-positive bacteria, gram-negative bacteria 7551.
- crystalline**, biodegradation, ozonation, wastewater treatment 1480.
- ctamycin**, biosynthesis, association, 3-amino-5-hydroxybenzoic acid, *Streptomyces* 1444.
- ctaplanin**, *Actinoplanes missouriensis* biosynthesis, isolation, chemical composition 4870.
- genes, mapping, chromosome 6, *Saccharomyces cerevisiae* 6788.
- ctinid**, *Actinidia chinensis*, Pseudomonas canker, pathogenesis, USA, California 275.
- ctinobacillus actinomycetemcomitans**, antibacterial activity, sodium fluoride 5861.
- media (selective) 710.
- ctinomadura**, alanine peptidase, active sites, binding, monobactams 4274.
- chromomycin, biosynthesis, characterization 6561.
- ctinomadura azurea sp. nov.**, catanomycin biosynthesis 1416.
- ctinomadura recticatena sp. nov.**, antibiotics production, rubromycin, griseorodin 4060.
- ctinomadura roseoviolacea**, akromycin, production, isolation, characterization 3541.
- rubromycins, structure 4372.
- ctinomycetes**, conversion, hydroxylation, novobicin, derivatives, chlorobiocin 5792.
- ctinomycetes thermophilus**, +Azotobacter chroococcum, +Mixobacterales, +Streptomyces+*Bacillus*, inoculum, effects on yield, *Solanum tuberosum*, Zea mays 8201.
- ctinomycetes viscosus**, antibacterial activity, sodium fluoride 5861.
- ctinomycetes**, aminoglycoside antibiotics biosynthesis, antibiotic resistance relationship 3016.
- aminoglycoside antibiotics, production, genetic engineering 5759.
- anconerin, isolation, amino acid sequence 2290.
- antibiotic A2315a biosynthesis 9210.
- antibiotic resistance, aminoglycoside antibiotics 3022.
- antimicrobial activity, nematocides 1325.
- biosynthesis, indolactam V, tumor-promoting agents 8653.
- classification methodology, chemical properties 1647.
- composting, sewage sludge, crop residues, *Oryza sativa* 7492.
- 2,4-dioxohexahydro-1,3,5-triazine inhibition 3970.
- production, incidence, pasture, nematocides effects on 7295.
- drinking water, aerosols, allergic alveolitis, seroepidemiology, man 4932.
- dust, isolation, enumeration, methodology comparison 1646.
- ecological distribution, environmental factors, population levels, soil, Australia 8991.
- enumeration, forests soil, labactril 25 treatment 4674.
- food sources, feeding, *Aphelenchus avenae* 7263.
- β -D-mannosidase, mannans hydrolysis, *Cocos nucifera* 8604.
- media (isolation) methodology 775.
- microbial pollution, odor intensity, relationship pH, oxygen, reservoirs 3212.
- odor compounds, chemical composition, water quality 2648.
- odor compounds, fishponds, absorption, off flavor, *Italcara punctatus* 3211.
- odor compounds, odors, off flavor, water quality, conferences 3387.
- odor compounds, volatiles, taste, water quality 2649.
- production, ethane, ethylene, acetylene 8265.
- proteinase inhibitors production, screening methodology 7657.
- rhizosphere, antagonism, *Laccaria laccata*, *Pythium*, *Phytophthora*, *Eucalyptus marginata*, *Pinus radiata* 2099.
- role, biodegradation, wood 1246.
- (S)-N,N'-ethylenediamine succinic acid, production, inhibition, phospholipase C 5567.
- sediments analysis, cooling towers 561.
- soil microorganisms, ecological analysis, soil properties, soil temperature, deserts 4623.
- soil microorganisms, isolation, membrane filtration 6316.
- soil microorganisms, methoxychlor effects on 9024.
- starter cultures, aroma, sausages 7858.
- symptoms, leaves, *Tozzia alpina* 8204.
- vertical distribution, indigenous species, ground water 5816.
- ctinomycin D**, sensitivity, RNA replication, plant viruses, *Vigna unguiculata* leaves infection 7931.
- ctinoplanes**, antibiotic A-16686, biological properties, antibacterial activity, *Staphylococcus*, *Streptococcus* 6571.
- Actinoplanes**, (continued)
- antibiotic A-16686, isolation, characterization 6568.
- Actinoplanes missouriensis**, biosynthesis, actaplanin, isolation, chemical composition 4870.
- Actinoplanes leichomyctus**, leichomycin, aromatic compounds, amino acid composition 9213.
- leichomycin, isolation, physicochemical properties 8384.
- Actinorrhizas**, *Alnus*, Frankia, nitrogen fixation, conferences 5100.
- Alnus glutinosa* nodules, factors affecting dormancy 347.
- Alnus incana*, Frankia, nitrogenase activity 4609.
- Casuarina, histochemistry, Frankia 4604.
- Frankia, *Alnus glutinosa*, nitrogen fixation 4593.
- Frankia, *Alnus glutinosa* roots 2096.
- Frankia, *Alnus incana* subsp. *rugosa*, characterization 4598.
- Frankia, *Alnus rubra*, *Cytisus scoparius*, nutrient uptake, silviculture, *Pseudotsuga menziesii* 8159.
- Frankia, aromatic compounds effects on 4595.
- Frankia, biotyping, nodulation, *Alnus glutinosa* 8157.
- Frankia, Casuarina 4596.
- Frankia, hyphae morphology, biotyping, nodulation, *Alnus nitida* 8158.
- Frankia, inoculation, stimulation growth, *Alnus* 8160.
- Frankia, nitrogen fixation, *Alnus*, conferences 8499.
- Frankia, nitrogen fixation, interaction vesicular-arbuscular mycorrhizas, phosphate nutrient uptake, *Hippophae rhamnoides* 8243.
- Frankia, nitrogenase, acetylene reduction, seasonal variations, relationship reproductive organs growth, *Alnus glutinosa* 8155.
- Frankia, nitrogenase, nitrogen fixation, hydroponics, silviculture, nutrient requirements, *Alnus incana* 8152.
- Frankia, nitrogenase, nitrogen fixation, measuring techniques, acetylene reduction, nodules, *Alnus incana* 8153.
- Frankia, nodulation, inoculation, agroforestry, Casuarina 8149.
- Frankia, nodulation, inoculation, propagation, seedlings, *Alnus crispa* 8154.
- Frankia, nodules ultrastructure, *Oryza drummondii*, *Rubus ellipticus* 8150.
- Frankia, root hairs, *Alnus rubra* 4599.
- Frankia, ultrastructure, nitrogenase, nitrogen fixation, *Alnus nitida*, *Colletia cruciata*, *Datisca* 2969.
- lectins binding, plants, Frankia 4602.
- media (isolation), Frankia 8471.
- nitrogen fixation, litter decomposition, nitrogen cycle, peatlands, *Myrica gale* 8244.
- nitrogen fixation, *Myrica gale* 4608.
- nitrogen fixation, nodulation, nodules morphology, *Datisca cannabina*, *Alnus nitida* 8151.
- nitrogen fixation, plantations, silviculture, *Alnus glutinosa*, *Populus nigra* x *Populus trichocarpa* 8156.
- nitrogen fixation, seasonal variations, peatlands, *Myrica gale* 9001.
- nitrogen fixation, temperate environments, agroforestry, reviews 2915.
- nitrogen fixation, tropical environment, Casuarinaceae, reviews 2914.
- nodules, *Alnus glutinosa*, abscisic acid localization 346.
- nodules, Casuarina cunninghamiana, *Myrica gale*, hemoglobins levels 4605.
- ymbiosis, plants, nitrogen fixation 9009.
- actinosporangium**, pyrrolomycin C, pyrrolomycin D, pyrrolomycin E, structure 2287.
- actinosporangium vitaminophilum**, pyrrolomycin C, pyrrolomycin D, pyrrolomycin E, physicochemical properties, biological properties 2285.
- pyrrolomycin F, derivatives, biosynthesis, bromide media, antibacterial activity, antifungal activity 2295.
- actithiazic acid**, cephalen, antibiotic synergism, antibacterial activity, *Escherichia coli* 1390.
- Activated sludge**, abattoirs, dissolved oxygen, wastewater treatment effluents 6668.
- abattoirs, industrial effluents, nutritive value, chickens 7015.
- acclimatization, biodegradation, phenols, benzoic acid derivatives 5829.
- aniline biodegradation, nitrification inhibition 4093.
- biochemical oxygen demand, oxygen consumption, monitoring, automated methods 8330.
- biodegradation, disinfectants, acclimatization 4112.
- biodegradation, o-phenylphenol 7836.
- biological activity, aminopetase biosynthesis, measurements 4094.
- biomass, ATP measurements, wastewater treatment 6696.
- bovine serum albumin removal 2357.
- bulking, filamentous microorganisms 7495.
- cadmium uptake, EDTA effects on 3192.
- carbon sources, nitrogen sources, energy metabolism, statistical analysis 7522.
- dehydrogenase activity, dissolved oxygen effects on 4095.
- denitrification, nitrification 2345.
- digestion (anaerobic), research programs recommendations 7506.
- dissolved oxygen diffusion, mathematical models 9239.
- dissolved oxygen, oxygen consumption, mathematical models 6690.
- enumeration, enterovirus, characterization 4930.
- extracellular polymers extraction, methodology 1490.
- extracellular polymers extraction methodology, flocculation correlation 1462.
- flocculation, bacteria 4119.
- humic acid biodegradation, γ radiation treatment, leachates 1489.
- industrial effluents, breweries, wastewater treatment 4091.
- kinetics, dissolved oxygen levels, mathematical models 1464.
- kinetics, mathematical models 544.
- kinetics, wastewater treatment, abattoirs effluents 6667.
- Klebsiella aerogenes capsules polymers, binding, heavy metals 6679.
- mathematical models 6692.
- mathematical models, bulking, sedimentation, flocculation 6687.
- metabolism, biodegradation, peptone, propyl alcohol, methanol 6706.
- methanogenesis, sedimentation, methanogenic bacteria 3203.
- microorganisms acid phosphatase stimulation, Lumbricidae activity 7265.
- microorganisms biological activity, resazurin reduction, monitoring 549.
- microorganisms climax community characterization 1491.
- models 2348.
- nematophagous fungi, parasitism, predation, *Nemata* population dynamics 7537.
- nitrification, denitrification 1473.
- nutrient concentrations, nitrogen 4083.
- oxidative metabolism, phenols removal, wastewater treatment 5847.
- pesticides removal 4086.
- phenol biodegradation, kinetics 6674.
- phenol inhibition, models, wastewater treatment 552.

Activated sludge, (continued)

- phenol inhibition, oxygen consumption, monitoring, computer applications 6703.
 pollutants biodegradation kinetics, industrial effluents 1486.
 reactors, cutting fluids biodegradation, bacteria identification 178.
 redox potential, malate dehydrogenase activity 6686.
 respiration, bioassays, toxicity testing, chemical pollution, pollution monitoring 543.
 sediment, bacteria flocculation, extracellular polymers production, role, nutrient balance 2332.
 sewage sludge bulking, filamentous microorganisms 2343.
 sewage treatment 5826.
 sewage treatment, kinetics, mathematical models 2381.
 viruses recovery 548.
 viruses recovery, waste water effluents 4956.
 waste treatment, lipids emulsions 3195.
 waste treatment, pentachlorophenol containing synthetic wastes, use, Arthrobacter 559.
 wastewater treatment, aerobic bacteria, ATP, monitoring, characterization 8409.
 wastewater treatment, aliphatic alcohols effects on oxygen consumption 6675.
 wastewater treatment, carbon (activated), industrial effluents, dyes 6677.
 wastewater treatment, coal 5843.
 wastewater treatment, copper effects on 4113.
 wastewater treatment, dairy industry 4115.
 wastewater treatment, design, kinetics, microorganisms 4925.
 wastewater treatment, industrial effluents, food industry 4111.
 wastewater treatment, kinetics, mathematical models 4900.
 wastewater treatment, leachates, industrial wastes, landfills 4084.
 wastewater treatment, microorganisms, population dynamics 4105.
 wastewater treatment, oxygen uptake assays use processes control 3193.
 wastewater treatment, reviews, bibliographies 4905.
 wastewater treatment, tin biocides inhibition 6673.
 wastewater treatment, 2,4-dinitrotoluene conversion 7493.
 Zoogloea biodegradation organic compounds 7490.
- Active transport,**
 inhibition, nystatin, antibiotic resistance, *Candida tropicalis* 5716.
- Aculeacin A,**
 antifungal activity, cell walls, ultrastructure, *Candida albicans* 9108.
- Aculeximycin,**
 Streptoporangium albidum, biosynthesis, taxonomy 2292.
 Streptoporangium albidum, isolation, fermentation, antibacterial activity, antifungal activity, larvicides, *Culicidae* 2293.
- Acyl carrier protein,**
 secondary structure, tertiary structure, nuclear Overhauser effect, *Escherichia coli* 1.
- Acyl-CoA,**
 activation pyruvate carboxylase, yeasts 889.
- Acyl-CoA dehydrogenase (NADP⁺),**
 purification, characterization, electrophoresis, *Escherichia coli* 7697.
- Acyl-CoA oxidase,**
Candida tropicalis, bioassays, fatty acids serum levels 586.
- Acyl-CoA synthetase,**
Pseudomonas aeruginosa, bioassays, fatty acids serum levels 586.
- 3-Acylamino-1-(phenyl)1H-tetrazol-5-ylamino)-2-azetidinones,**
 synthesis 5587.
- 3-Acylamino-2-azetidinone-1-sulfonic acid,**
 derivative, synthesis, antibacterial activity 511.
- 3-Acylamino-3-methoxy-2-azetidinone-1-sulfonic acid,**
 derivatives, synthesis, antibacterial activity 1438.
- Adenosine,**
 derivatives, rabies virus antiviral activity 4765.
- Adenosine deaminase,**
Escherichia coli, 2,6-diamino-9-(2-hydroxyethoxymethyl)purine conversion, 9-(2-hydroxyethoxymethyl)guanine production 902.
- Adenosinetriphosphatase,**
 characterization, binding adenosinetriphosphatase inhibitor, mitochondria, yeasts 305.
 coupling factor 1, magnesium, cadmium complex, reaction mechanisms, structure, thermophilic bacteria 895.
 Lactobacillus casei, molecular weight, subunits activity,
 N,N'-dicyclohexylcarbodiimide inhibition 2589.
 protons, ATP stoichiometry, N.M.R., membrane potential, mutants, *Escherichia coli* 8531.
- Adenosinetriphosphatase inhibitor,**
 content, binding adenosinetriphosphatase, mitochondria, yeasts 905.
- Adenosylhomocysteinase,**
 Alcaligenes faecalis, use, S-adenosylhomocysteine production 8623.
 purification, characterization, electrophoresis, Alcaligenes faecalis 7716.
- S-Adenosylhomocysteine,**
 production, use, Alcaligenes faecalis, adenosylhomocysteinase 8623.
- Adenosylmethionine decarboxylase,**
 purification, characterization, reviews, *Escherichia coli*, Saccharomyces cerevisiae 8569.
- Adenovirus,**
 antigens, antibodies, nitrocellulose enzyme-linked immunosorbent assay 5020.
 antigens, detection, enzyme-linked immunosorbent assay 623.
 cell culture, cell lines 3242.
 detection, immunoperoxidase test methodology, cell culture 6734.
 electron microscopy, detection, antigen-antibody complexes 653.
 infectivity, indirect fluorescent antibody test, cell culture 4995.
 specificity, monoclonal antibodies selection, immunofluorescence solid phase methods 5385.
 water pollution, rivers, Japan 8423.
- Adenovirus (avian),**
 immunoglobulin G, identification, serotypes, detection, enzyme-linked immunosorbent assay 5014.
- Adenovirus (human)**
 hemagglutination, erythrocytes, glutaraldehyde fixation 2440.
 infection, immunoassays diagnosis, nasopharynx secretions, faeces, children 3238.
- Adenovirus (human) 3,**
 antiviral activity, antibodies+interferon, conjunctiva cell culture, man 2227.
- Adenovirus (human) 5,**
 antiviral activity, cis-platinum diamminodichloride 9124.
 HeLa cells, DNA-binding protein, X-ray crystallography 2563.
 hexons antibodies, immunodiagnosis, counter immunoelectrophoresis 2439.
- Adenovirus (porcine),**
 cell culture, purification 6737.
- Adenylate cyclase,**
 activity, calmodulin activation, *Neurospora crassa* 7753.
- Adenylyltransferase,**
Staphylococcus aureus, *Staphylococcus epidermidis*, clinical isolates, purification, characterization, role, antibiotic resistance 5165.
- Adhesives,**
 forest products, biodegradation, fungi 7241.
- Adiantum capillus-veneris,**
 rhizosphere microorganisms, phyllosphere microorganisms, fungi 8981.
- Adjuvants,**
 carriers, N-acetyl-muramyl-L-alanyl-D-isoglutamine, Clostridium tetani toxoids, Corynebacterium diphtheriae synthetic peptides, antigenicity,
 N-acetyl-muramyl-L-alanyl-D-isoglutamine, mice 6656.
 major histocompatibility complex purification, immunogenicity, vaccines 6589.
- Adoxophyes orana,**
 biological control, baculovirus 2642.
- ADP,**
 gamma-aminobutyrate S affinity, *Bacillus brevis* 1409.
 succinyl-CoA synthetase (ADP-forming) binding sites, 5'-p-fluorosulfonylbenzoyl-adenosine chemical modification, *Escherichia coli* 1758.
- ADP-ribosyl transferase,**
 nucleotide sequence, amino acid sequence, biosynthesis, comparison, *Escherichia coli*, *Vibrio cholerae* 7120.
- ADP-ribosylation,**
 sites, *Vibrio cholerae* toxins A1-subunit, amino acid sequence 1085.
- Aedes,**
 biological control, snow pools, *Bacillus thuringiensis*, USA, Michigan 6919.
 larvae, biological control, *Leptogorgia chapmani* 8640.
- Aedes aegypti,**
Bacillus thuringiensis, serotypes, endotoxins, toxicity, biological control 8635.
Bacillus thuringiensis subsp. *israelensis*, biological control, Israel 2672.
Bacillus thuringiensis subsp. *israelensis*, biological control, Israel 3543.
 biological control efficacy, suspended matter, turbidity, effects on, *Bacillus thuringiensis* var. *israelensis* 8642.
 biological control, mortality, dose-response effects, *Culiciniomyces clavisporus* 6911.
 cell culture, cytopathology, δ -endotoxin, *Bacillus thuringiensis* subsp. *israelensis* 4491.
 larvae, *Bacillus thuringiensis* toxicity, biological control 8647.
 larvae, biological control, pathogenicity, *Metarhizium anisopliae* 8630.
 larvae, biological control, toxicity, *Bacillus thuringiensis*, *Bacillus sphaericus*, pollution effects, fresh water 2658.
 larvae, mortality, density effects on, biological control, *Bacillus thuringiensis* subsp. *berliner* 4396.
 larvae, toxicity, *Bacillus thuringiensis* subsp. *israelensis* proteins crystals, solubilization methodology 1859.
 larvae, toxicity, peptide antibiotics, comparison toxins *Bacillus thuringiensis* 2661.
- Aedes cantator,**
 biological control, pathogenicity, *Erynia aquatica* 2665.
- Aedes caspius,**
 biological control, field trials, formulations, *Bacillus thuringiensis* subsp. *israelensis* 6916.
- Aedes detritus,**
 biological control, field trials, formulations, *Bacillus thuringiensis* subsp. *israelensis* 6916.
- Aedes triseriatus,**
 La Crosse virus antigens, enzyme immunoassay 609.
- Aegilops ventricosa,**
 disease resistance, *Pseudocercospora herpeticoides* eye spot, genes, transfer, *Triticum aestivum* 8078.
- Aeration,**
 association, denitrification, waste water, bacteria 1466.
 atmospheric pressure, fermentors, continuous culture, *Candida utilis* 5924.
 2,3-butanediol production, *Klebsiella pneumoniae* 3547.
 carbon sources, regulation, *Streptomyces clavuligerus* biosynthesis cepham 3097.
 colicin production, *Bacillus polymyxa* 4680.
 column, sewage treatment, bacteria media (culture), oxygen adsorption rates 3291.
 composting, agricultural wastes, industrial wastes, wool 4100.
 composting, sewage sludge 5832.
 dissolved oxygen, fermentors, penicillin fermentation, immobilized cells, Penicillium chrysogenum 7435.
 effects on oleandomycin biosynthesis, *Streptomyces antibioticus* 2277.
 effects on pectinolytic enzymes production, continuous culture, *Aspergillus niger* 8601.
 fermentation, lipids, carbon sources, salinomycin production, *Streptomyces albus* 4874.
 fermenters 8509.
 filters, microorganisms, carbon (activated), waste treatment 6698.
 glycolysis, anaerobic conditions, *Leuconostoc mesenteroides*, effects on 854.
 nitrification, modeling, wastewater treatment, supports, reactors 6670.
 sewage sludge, composting, bulking agents, tires 4082.
 sewage, water pollution, biodegradation, water treatment, streams 8410.
 wastewater treatment, industrial effluents, phenols, coal 4902.
- Aerial photography,**
 surveys, *Ceratophyllum fagacearum*, wilt, Quercus, USA, Texas 8189.
- Aerobic bacteria,**
 animal isolates, antibiotic resistance, chlorotetracycline, relationship feeds additives, pigs 8295.
 antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 6485.
 antibiotic sensitivity testing, ciprofloxacin 4730.
 antibiotic sensitivity testing, dissolved oxygen levels, electrochemistry, diagnosis, bacteriuria 8345.
 clinical isolates, hysterectomy postoperative infection, antibiotic sensitivity testing, man 9177.
 composting, sewage sludge, crop residues, *Oryza sativa* 7492.
 hydrolysis, meat, digestion (anaerobic), methanogenesis, bioreactors, methanogenic bacteria 7303.
 media (enrichment), cellulolytic enzymes activity 35.
 recovery, bottles methodology comparison, clinical isolates 5038.
 rods, identification, potassium hydroxide suspensions, comparison, vancomycin disc-diffusion test 3262.
 spoilage, pasteurization, packaging, cold storage, shelf life, seafood, *Crassostrea virginica* 8720.
 wastewater treatment, activated sludge, ATP, monitoring, characterization 8409.

- Aerobic conditions,**
blood culture, methodology comparison 1626.
composting, animal wastes, Korea, Rep. 4101.
com silage biodegradation, microorganisms 5360.
effects on, liquid culture, detection, bacteremia, fungemia, anaerobic conditions 2514.
hydrocarbons production, microorganisms 9034.
wastewater treatment, nitrogen sources, nutrient deficiency, models 1479.
- Aeromonas,**
biotypes, enterotoxins biosynthesis 2767.
contamination, drinking water, isolation, Australia 8412.
drug resistance, plasmids incidence, *Salmo gairdneri* isolates 9072.
indicator species, population levels, water temperature, rivers, estuaries 4131.
isolation, *Oryza sativa*, rhizosphere, nitrogen fixation 5653.
monosodium methanearsonate, metabolism, conversion 1284.
oil dispersants biodegradation, sea water 1876.
taxonomic significance, enterotoxins biosynthesis 3760.
- Aeromonas hydrophila,**
animal isolates, antibiotic sensitivity testing 477.
antibiotic sensitivity testing, animal isolates 8350.
biotypes, enterotoxins biosynthesis 2767.
drinking water contamination, seasonal variations, clinical isolates correlation 8414.
extracellular enzymes, proteinase, cold storage effects on recovery 7762.
indicator species, wastewater treatment 2342.
interference membrane filtration, coliforms, drinking water 2391.
man, feces, media (isolation) 7592.
Plesiomonas shigelloides, feces, man 7592.
population levels, culture systems, aquaculture, *Lotularus punctatus* 6707.
starch degradation, 2,3-butanediol production 5226.
- Aeromonas hydrophila subsp. anaeerogenes,**
end-1,4- β -D-mannase, purification, characterization 5135.
- Aeromonas hydrophila subsp. proteolytica,**
animal isolates, antibiotic sensitivity testing 477.
- Aeromonas salmonicida,**
drug sensitivity testing, nifurpirinol, pirimidic acid, trimethoprim, chloramphenicol, nalidixic acid 8303.
survival, rivers fresh water, role disease transmission, furunculosis, *Salmonidae* 4037.
- Aerocoles,**
bacteria, mortuaries, environmental hygiene, ventilation 2415.
bacteria spores, pathogens, laminar air flow, safety cabinets 9262.
filtration, reduction, risks, occupational exposure, antitumor antibiotics, DNA tumor viruses, production, fermenters 8624.
Legionella pneumophila, disease transmission, epidemiology 3214.
particulate pollution, microorganisms, association, harvesting machinery, measuring techniques, mathematical models 3229.
Puccinia hordei, ureidinosporous, deposition, methodology, *Hordeum vulgare* 8786.
waste water, irrigation, viruses microbial pollution, public health risks, reviews 2336.
wastewater treatment, microbial pollution, pollution research 3187.
- Aechynomene,**
stems nodulation, *Rhizobium* 9010.
- Aechynomene indica,**
stems nodulation, *Rhizobium* physiology characterization 2155.
- Aechynomene virginica,**
biological control, weed control, *Colletotrichum gloeosporioides* spores production, fermenters 3895.
- Afinity chromatography,**
cellulase 4302.
cellulase purification methodology, *Trichoderma longibrachiatum* 882.
malolactic fermentation activity purification, *Leuconostoc oenos* 8600.
multiple forms, purification, characterization, neurotoxins, clostridium tetani 4293.
protein purification, use transition metals chelates 3430.
protocatechuate 3,4-dioxygenase purification, *Pseudomonas fluorescens* 3486.
purification, cellulase, *Chaetomium cellulolyticum* 5143.
purification, characterization, phosphogluconate dehydratase, *Zymomonas mobilis* 4293.
purification, elongation factor Ts, *Escherichia coli* 8522.
purification, exo-cellobiohydrolase isoenzymes, *Trichoderma reesei* 6867.
purification, fermentation products, reviews, biotechnology 5227.
purification, hemagglutinins, influenza virus 8435.
purification, proteinase, *Bacillus mesentericus* 7732.
- Aghanistan,**
epidemiology, *Agrobacterium* crown gall, *Vitis vinifera* 1151.
- Aflatoxinol,**
determination, liquid chromatography, eggs, food contamination 8732.
feeds contamination, levels, eggs, tissues, chickens 8727.
- Aflatoxins,**
association, food contamination, man, domestic animals, reviews, historical account 7046.
association, food contamination, reviews, historical account 7049.
- Aflatoxin B₁,**
food contamination, peanuts meals, corn meals, detection methodology, comparison 7066.
- Aflatoxin B₁, (continued)**
grain contamination, *Oryza sativa* 8733.
incidence, wheat 1927.
levels, temperature, humidity effects on, manure, chickens 6208.
mutagenicity testing, Ames test 3738.
production, antifungal agents effects on, *Aspergillus parasiticus* 3745.
radioimmunoassay, polyethylene glycol, separation techniques, ligands 7099.
thin-layer chromatography detection, olive oil 1931.
- Aflatoxin B₂,**
contamination, peanuts, gas chromatography, mass spectroscopy 6206.
- Aflatoxin G₁,**
food contamination, peanuts meals, corn meals, detection methodology, comparison 7066.
- Aflatoxin G₁,**
Aspergillus parasiticus biosynthesis, herbal medicines effects on 5377.
detection, food, screening methodology, Egypt 7064.
- Aflatoxin M₁,**
chemical analyses, extraction, thin-layer chromatography, food contamination, nuts, grain 7108.
determination, liquid chromatography, eggs, food contamination 8732.
feeds contamination, levels, eggs, tissues, chickens 8727.
food contamination, cow's milk 7892.
- Aflatoxin M₂,**
chemical analyses, extraction, thin-layer chromatography, food contamination, nuts, grain 7108.
- Aflatoxin Q₁,**
antibodies production, use enzyme-linked immunosorbent assay 3743.
Aspergillus, metabolism, liver, rats 223.
- Aflatoxins,**
ammonium hydroxide, effects on, extraction, cooking, peanuts, flour 3749.
analysis, thin-layer chromatography, comparison, liquid chromatography, food contamination, peanuts 8731.
analysis, thin-layer chromatography, high-pressure liquid chromatography, fatty acids fluorescence, grain, *Zea mays* 8726.
Aspergillus biosynthesis, in vitro, isolation, man food, animals feeds 7062.
Aspergillus flavus, *Aspergillus parasiticus*, biosynthesis, factors affecting 7091.
Aspergillus flavus, detection, peanuts 1078.
Aspergillus flavus, dietary intake effects on, energy utilization, proteins utilization, ducks 3721.
Aspergillus flavus, food contamination, effects on proteins nutritive value, chickens 5352.
Aspergillus flavus, food contamination, levels, *Prunus amygdalis*, nuts 7101.
Aspergillus flavus, production, meals, soybeans, cottonseed 3746.
Aspergillus parasiticus, acetic acid incorporation, association antifungal agents 217.
Aspergillus parasiticus, biosynthesis, seeds oils effects on 3747.
Aspergillus parasiticus, food contamination, *Zea mays*, *Phaseolus*, detection, use, chromatography methodology 7088.
Aspergillus, separation techniques, use, column chromatography 5374.
biosynthesis, accumulation, chickens feeds, storage conditions effects on 7094.
biosynthesis, *Aspergillus parasiticus*, *Aspergillus flavus*, lipid peroxidation 1077.
biosynthesis, *Aspergillus*, casein, substrates, isolation, milk, cattle, buffaloes 7078.
biosynthesis, *Aspergillus*, elements nutrient requirements 7068.
biosynthesis, *Aspergillus flavus*, antifungal activity, plant extracts, medicinal plants 7897.
biosynthesis, *Aspergillus flavus*, *Aspergillus parasiticus*, rice, cheddar cheese, temperature effects on 3703.
biosynthesis, *Aspergillus flavus*, m-bisulfite effects on 7076.
biosynthesis, *Aspergillus flavus*, Nicotiana tabacum leaves, storage conditions effects on 7092.
biosynthesis, *Aspergillus flavus*, nitroguanidine, acriflavin, diethylamine, induction mutation, effects on 7084.
biosynthesis, *Aspergillus*, light, oxygen, sodium chloride, effects on 7071.
biosynthesis, *Aspergillus*, nutrient sources 7074.
biosynthesis, *Aspergillus parasiticus*, cerulenin, tetrahydrocerulenin, effects on 1075.
biosynthesis, *Aspergillus parasiticus*, factors affecting, in vitro 7067.
biosynthesis, *Aspergillus parasiticus*, herbal medicines effects on 5377.
biosynthesis, *Aspergillus parasiticus* spores injuries, sorbic acid, propionic acid, effects on 7042.
biosynthesis, association, nitrate, repression, averufin, *Aspergillus parasiticus* 220.
biosynthesis, caffeine inhibition, *Aspergillus parasiticus* 7040.
biosynthesis, glucose effects on carbohydrates catabolism, *Aspergillus parasiticus* 8723.
biosynthesis inhibition, *Aspergillus parasiticus*, caffeine role 218.
biosynthesis, Nicotiana tabacum leaves mycoflora, Iraq 7089.
biosynthesis, *Zea mays* hybrids seeds 8083.
chemical analyses, extraction, thin-layer chromatography, food contamination, nuts, grain 7108.
chemical analyses, extraction, thin-layer chromatography, food contamination, nuts, grain 7108.
contamination, assays, dietary intake safety, man, reviews 7045.
contamination, chickens feeds, correlation zinc levels 4473.
contamination, feeds, oilseed crops 7899.
contamination, food, bibliographies 5379.
contamination, *Vicia faba* beans, Egypt 7085.
contamination, *Zea mays* genotypes, disease resistance, *Aspergillus flavus* 8880.
contamination, *Zea mays* hybrids, endospore characterization association, environmental effects 8724.
detection, animals feeds, man food, India 7051.
detection, animals feeds, methodology, use, high-performance liquid chromatography, thin-layer chromatography 7053.
detection, food, man, animals feeds, Zaire 7057.
detection, *Helianthus annuus* seeds, Argentina 7061.
detection methodology, 8725.
detection methodology, agricultural products, developing countries 216.
determination, grain dusts, thin-layer chromatography 3704.
determination, liquid chromatography, food contamination, peanuts 8729.
detoxification, *Aspergillus flavus*, *Aspergillus niger* 1081.
feeds contamination, feeding behavior, chickens 7898.
food contamination, coconuts, products, incidence, India 7894.
food contamination, corn, control, reviews 222.

Aflatoxins, (continued)

- food contamination, *Gossypium hirsutum* seeds meals, detoxification methodology 7081.
 food contamination, peanuts meals, corn meals, detection methodology, comparison 7066.
 food contamination, peanuts meals, decontamination methodology use methylamine + calcium hypochlorite 7097.
 food contamination, production, grain, comparison, Zea mays, factors affecting 7052.
 food contamination, reviews, historical account 7049.
 food contamination, safety regulations, limitations, reviews 7065.
 food contamination, screening, prevention, control association food processing, reviews 7070.
 levels, *Arachis hypogaea* 7041.
 levels, *Aspergillus flavus*, Zea mays 6204.
 mycotoxicosis, association ingestion animals feeds, Yugoslavia 7048.
 oils, seeds, *Gossypium hirsutum* 1932.
 production, *Arachis hypogaea*, disease resistance, *Aspergillus flavus* infection, cultivars comparison 7066.
 production, *Aspergillus flavus*, *Aspergillus parasiticus*, amino acids effects on 215.
 production, *Aspergillus niger*, association, *Aspergillus flavus*, corn, factors affecting, inhibition 2758.
 production, *Aspergillus parasiticus*, antifungal activity, essential oils, spices 7891.
 production, *Aspergillus parasiticus* infection, *Vigna unguiculata*, Tanzania 3795.

Africa

- Cajanus cajan diseases, crop production, economic importance 7139.
 disease resistance plant breeding, *Cajanus cajan* 8899.
 disease resistance plant breeding, crops 8893.
 disease resistance plant breeding, *Oryza sativa* 8896.
 disease resistance plant breeding, phytopathogenic fungi, *Pennisetum americanum* 8894.
 disease resistance plant breeding, Zea mays 8895.
 plant breeding, disease resistance, conferences, books 9349.
 plant breeding disease resistance, reviews 8892.

Africa swine fever virus,

- antibodies detection, immunoperoxidase plaque assay methodology 634.

African swine fever,

- immunodiagnosis, indirect fluorescent antibody test, micromethods 1543.

African swine fever virus,

- antigens comparison, enzyme-linked immunosorbent assay, immunodiagnosis 1542.
 antigens, detergents solubilization, inactivation, vaccines, immunity, pigs 1452.
 antiviral activity, iodine disinfectants 1345.
 growth, cell lines, *Arthropoda*, Bufo 1545.
 structural proteins, purification, use enzyme-linked immunosorbent assay 1547.

Agar

- antiserum methodology, *Legionella* detection, isolation 1620.
 Congo red, measuring techniques, virulence, *Yersinia enterocolitica* 749.
 cinnomoxazole containing, association, *Streptococcus group A* isolation 1666.
 fibrinogen, media, *Staphylococcus aureus* enumeration methodology, food contamination 6183.
 gelatin, media methodology, use, detection, anaerobic bacteria gelatinase 2457.
 immobilization, tyrosine phenol-lyase activity, *Citrobacter freundii* 7656.
 isolation, fruits, yeasts 9331.
 media, comparison, anaerobic bacteria identification methodology 1644.
 media (culture), fecal coliforms, recovery, water 8415.
 media (culture), photooxidation, *Campylobacter fetus* 4210.
 milk, novobiocin susceptibility, *Staphylococcus aureus* 1422.
 milk, media (isolation), *Bacillus*, spore germination, heat activation, enumeration 1911.
 organic acids production association autoclaves, effects on mycorrhizas spore germination 5934.
 precipitin test, infectious bursitis virus 8453.
 substitutes, gums analysis 774.
 +tea powders, inhibition, bacteria 7369.
 Trichophyton, *Trichophyton soudanense* identification methodology 1672.
 tubes, media (isolation), *Salmonella* 2503.
 yolk, media (culture), enumeration, *Clostridium sporogenes*, spores, methodology 674.

Agar diffusion test,

- antibiotic sensitivity testing, measuring techniques, calipers 743.
Bacillus stearothermophilus, cow's milk, penicillin detection 7437.
 bacitracin antibacterial activity, differentiation, *Staphylococcus*, *Micrococcus* 1661.
 cefazidime antibacterial activity 2259.
 ceftriaxone antibacterial activity, *Enterobacteriaceae* 1392.
 comparison, dilution tests, bactericidal activity, azlocillin, ticarcillin, *Pseudomonas aeruginosa* 4841.
 fosfomycin sensitivity, bacteria, standardization 537.
 β -lactam antibiotics antibacterial activity, *Staphylococcus intermedius*, β -lactamase effects on 9157.
 metronidazole, bioassays, *Clostridium perfringens* 7365.
 netilmicin, *Pseudomonas aeruginosa* 4865.
 polymyxin, amikacin, *Mycobacterium fortuitum*, *Mycobacterium chelonae*, differentiation 1405.
 quality control, ampicillin + sulbactam antibacterial activity 4834.
 quality control, antimicrobial agents susceptibility 1379.
 quality control, bacteria 4037.

Agar dilution test,

- antibiotic sensitivity testing, filamentous microorganisms, fungi 5763.
 antimicrobial agents antibacterial activity, *Clostridium*, animal isolates 3050.
 drug sensitivity testing 4728.

 β -Agarase,

- purification, characterization, *Pseudomonas atlantica* 887.

***Agaricus bisporus*,**

- mycelia growth, carbon sources, *Bacillus subtilis* cell walls biodegradation 6151.

***Agaricus bisporus*,**

- blotch, *Pseudomonas tolaasii*, pathology, phenotyping 4564.
 catechol oxidase, monophenol monooxygenase, active sites, copper complex, comparison *Neurospora crassa* 5174.
 cultivation techniques, harvesting, effects on water content 8701.
 cultivation, use, agricultural wastes, fermentation, thermophilic microorganisms 8408.
 cultural characteristics, cross-breeding, plant breeding 8694.
 growth, lastanox T20 effects on 8259.

***Agaricus bisporus*, (continued)**

- life cycle, lignocelluloses biodegradation 1879.
 γ radiation, use, preservation, characterization 8716.
 spoilage, monophenol monooxygenase activity, browning, citric acid effects on 3705.

***Agaricus brunneus*,**

- basidiospores, cryopreservation 8696.
 breeding, heat tolerance selection 7868.
 culture, outbreaks, *Megaselia halterata* 6278.
 pathogens, fungi, disease control, thiabendazole 8132.

***Agaricus campestris*,**

- biomass, single-cell protein, production, media (culture), peat hydrolysates 6807.
 calmodulin multiple forms, purification, characterization, U.V. spectroscopy 8513.

***Agaricus diporus*,**

- culture, Pakistan 7870.

Agarose,

- hydrolysis, use, immobilized enzymes, proteins immobilization 2580.
 immobilization, +Lens culinaris agglutinins, use, preparation, pseudorabies virus vaccines 3182.

Agave feruloydes,

- crop residues, single-cell protein production, gram-negative bacteria 3415.
 pulp, use production, polygalacturonase, pectinolytic enzymes, *Aspergillus niger* 5189.

Age,

- Helianthus annuus*, association, susceptibility, stalk rot, *Erwinia carotovora*, USA, North Dakota 2820.
 leaves, effects on, *Uromyces phaseoli* infection, appressoria formation, plants 1964.
 role, *Mela pomila* fruits susceptibility, *Venturia inaequalis* scab 2797.

Age distribution,

- biomass, mathematical models, fermentation 6129.

Agelas,

- metabolites, antibacterial activity, antifungal activity 9133.

Agelastidine A,

- antibacterial activity, *Agelas*, antifungal activity 9133.

Ageline A,

- antibacterial activity, *Agelas*, antifungal activity 9133.

Ageline B,

- antibacterial activity, *Agelas*, antifungal activity 9133.

Agaratum,

- bidens mottle virus infection susceptibility 3825.

Agaratum houstonianum,

- essential oils, toxicity, *Microsporium gypseum* 5505.

Agglutination,

- absorption, bioassays, *Bacteroides nodosus*, pili, proteins, methodology 678.
 antigenemia diagnosis, Legionnaire's disease, man 1587.
 antigens, Rose Bengal plate test, *Brucella abortus*, immunodiagnosis, brucellosis 7589.
 bioassays, diagnosis, methodology, typhoid fever, *Salmonella*, man 667.
 bioassays, virulence, *Yersinia* 6758.
 Bradyrhizobium japonicum, Glycine max lectins 3953.
Brucella, centrifugation effects on, clinical microbiology 699.
 comparison coagulase test, *Staphylococcus aureus*, differential diagnosis 7586.
 comparison, counter immunoelectrophoresis, Gram stain, diagnosis, meningitis, *Haemophilus influenzae* type b, *Streptococcus pneumoniae*, man 3275.
 comparison counter immunoelectrophoresis, *Streptococcus pneumoniae* serotyping 3512.
 comparison, enzyme-linked immunosorbent assay, detection, *Salmonella typhi*, antigen Vi, use, diagnosis 663.
 detection, bacteria antigens, cerebrospinal fluid, comparison counter immunoelectrophoresis 2483.
 detection, *Haemophilus influenzae* antigens, lung, pigs 2520.
 enterobacterial common antigen, *Staphylococcus aureus*, *Escherichia coli*, *Salmonella minnesota*, immunodiagnosis, infection 5911.
Haemophilus pleuropneumoniae, animal isolates, use, identification, serotyping 2516.
 identification, *Brucella* antigens 6759.
 identification, *Corynebacterium sepedonicum*, ring rot, diagnosis, *Solanum tuberosum* 8486.
 identification, *Streptococcus agalactiae* 9311.
 immunodiagnosis, Chlamydia infection, sheep, goats 2504.
 immunodiagnosis, meningitis, *Neisseria meningitidis*, *Streptococcus pneumoniae*, *Haemophilus* 2488.
 lectins, slides, identification *Staphylococcus* 700.
 lectins slides, *Neisseriaceae* identification methodology 5042.
 Leptospira, diagnosis, leptospirosis 729.
 2-mercaptoethanol, immunodiagnosis, *Haemophilus pleuropneumoniae* infection, pigs 7593.
 methodology, diagnosis, *Mycoplasma gallisepticum* infection, chickens 5078.
 methodology, *Streptococcus* antigens detection, blood culture 2460.
 Phadeback test, identification clinical isolates, *Streptococcus pneumoniae* 8465.
 protein A, detection antibodies, antigens, *Yersinia pseudotuberculosis* subsp.pestis 5029.
 protein A, detection antigens, arbovirus 4991.
 serotyping methodology, *Campylobacter fetus* subsp.jejuni 725.
 serotyping, Phadeback test, *Haemophilus influenzae* 5066.
 slides, comparison, fluorescent antibody test, *Legionella* clinical isolates identification 3301.
Staphylococcus aureus, detection, hepatitis B surface antigen, methodology 2443.
Streptococcus group A, antigens detection 1595.
Streptococcus group B, Phadeback test 752.
Streptococcus group C antigens identification methodology 2495.
 tests, *Haemophilus influenzae* b polyribose phosphate antigens detection, body fluids, man 1584.
 tests, *Staphylococcus aureus* identification, blood culture 1625.
 use, *Neisseria gonorrhoeae* detection 3300.
 use, *Serratia marcescens* identification methodology 1640.

Agglutinins,

- dairy products, staining, immunoassays, *Streptococcus lactis* 3718.
 Lens culinaris, +agarose immobilization, use, preparation, pseudorabies virus vaccines, pigs 3182.
 Medicago sativa, nodulation, cell surface, *Rhizobium meliloti*, strains 5651.
Solanum tuberosum, interaction, lipopolysaccharides, extracellular polysaccharides, *Pseudomonas solanaceae* 6285.

- ging, champagne, *Saccharomyces vini* 4405.
culture, effects on pathogenicity, *Corynebacterium sepeдонicum*, ring rot, *Solanum tuberosum* 7999.
Phaseolus vulgaris, effects on nitrogen fixation, *Rhizobium* 6361.
- glutination**
effects on oleandomycin biosynthesis, *Streptomyces antibioticus* 2277.
waste treatment, equipment, sedimentation, yeasts 5848.
- gricultural ecosystems**
fertilizers, nitrogen cycle, soil microorganisms 5665.
plant breeding, disease resistance, tropical environment, long-term effects 1177.
soil microorganisms, nutrient cycles, reviews 5630.
straw biodegradation, soil microorganisms, interaction, carbon, nitrogen 2699.
- gricultural land**
fallowing, denitrification, nitrogen cycle, *Triticum aestivum* 2988.
fallowing, denitrification, *Triticum aestivum* 2988.
nitrogen cycle, Denmark, reviews 2984.
- gricultural practica**
denitrification, reviews, crop fields 5671.
disease control, *Phaseolus vulgaris* soil-borne diseases 1210.
disease control, plant diseases 1188.
Glycine max, effects on pathogenesis, *Sclerotinia sclerotiorum* stem rot 1120.
phytopathogenic fungi, host-pathogen interactions, roots, *Triticum aestivum* 3807.
soil microorganisms, effects on 376.
wilt, *Fusarium oxysporum* f.sp. *niveum*, disease resistance, *Citrullus lanatus* 2848.
- gricultural products**
aflatoxins detection methodology, developing countries 216.
- gricultural wastes**
Cocos nucifera, +cattle animal wastes, methane production 1487.
composting, developing countries 4097.
digestion (anaerobic), pathogens reduction, *Fusarium oxysporum*, *Corynebacterium* 8399.
energy production, conferences, books 1700.
fermentation, thermophilic microorganisms, use, cultivation, *Agaricus bisporus* 8408.
Industrial wastes, wool, temperature, aeration, composting 4100.
lignocelluloses, carbon sources, endo-1,3- β -D-glucanase production, *Streptomyces* 3470.
pectinolytic enzymes production, *Aspergillus niger* 8605.
solid wastes, bark, composting 4099.
- griculture**
Aspergillus flavus, fluorescence, fungi, aflatoxins, *Zea mays*, *Gossypium hirsutum* 4474.
developing countries, biotechnology 318.
insect, waste water sprays, coxsackievirus B5, seroepidemiology, occupational exposure, man 4096.
nitrogen fixation, microorganisms, crop fields 9345.
- grobacterium**
adherence, virulence, plasmid pSA effects on 1966.
crown gall, *Vitis vinifera*, epidemiology, Afghanistan 1151.
crown gall, *Vitis vinifera*, etiology 3848.
 β -D-glucans structure 948.
host-parasite interactions, crown gall, cell proliferation, host plants 8855.
plant diseases, diagnosis 3760.
plant diseases, diagnosis, characterization 3778.
polyketone production, fermentation, ammonium stimulation 7681.
- grobacterium radiobacter**
biological control, crown gall, *Agrobacterium tumefaciens*, fruit trees, *Rosa*, *Chrysanthemum*, reviews 333.
biological control, crown gall, *Prunus persica* 334.
biological control, crown gall, *Prunus persica*, *Prunus amygdalis* 335.
enzymes, use production, guanosine diphosphate-L-lycose 6061.
glutamine production, polysaccharides, extracellular polymers 6056.
extracellular polymers, polysaccharides, seed treatments, biological control, damping-off, stimulation, seed germination, *Lycopersicon esculentum* 6309.
polysaccharides, carbohydrate composition, seed treatments, roots growth stimulation, biological control, *Pythium ultimum*, damping-off, *Beta vulgaris* 2891.
- grobacterium rhizogenes**
host specificity, *Vitis vinifera* 269.
transformation, *Nicotiana tabacum* roots tissue culture, effects on susceptibility, infection, tobacco mosaic virus, potato virus Y 8076.
- grobacterium tumefaciens**
cell surface carbohydrates role, crown gall tumors induction, plants 8768.
crown gall, bioassays, *Malus pumila*, *Rosa rugosa*, host range, disease control 343.
crown gall, biological control, *Agrobacterium radiobacter*, fruit trees, reviews 333.
crown gall, biological control, *Agrobacterium radiobacter*, *Prunus persica* 334.
crown gall, biological control, *Agrobacterium radiobacter*, *Prunus persica*, *Prunus amygdalis* 335.
crown gall, biological control, fruit trees 269.
crown gall, cell surface interaction, plant cells 8854.
crown gall, disease control, biological control, conferences 848.
crown gall, disease control, salicylic acid, acetylsalicylic acid, *Nicotiana tabacum* 7217.
crown gall, disease control, sewage sludge, soil amendment, *Rubus* 310.
crown gall, disease resistance, screening, plant breeding, inheritance, *Vitis amurensis* × *Vitis vinifera* 8908.
crown gall, fruit trees, British Isles 268.
crown gall, fruit trees, Italy 267.
crown gall, *Nicotiana rustica*, octopine biosynthesis detection 2808.
crown gall, nopaline dehydrogenase, D-lycopine dehydrogenase, activity, plants 6274.
crown gall, plants, opines utilization 7131.
crown gall, plants, silver nitrate staining tumors 4534.
crown gall, streptomycin, CGA 78039, rootstocks, *Malus pumila* 342.
crown gall, trees, characterization 5583.
crown gall tumors, asparaginopine, glutaminopine, isolation 2810.
crown gall tumors, indole-3-acetic acid treatment, *Solanum tuberosum* tubers 8874.
- grobacterium**
crown gall, *Vitis vinifera* 279.
glucose, galactose, polysaccharides biosynthesis, role lipids 6886.
nodules formation, gene expression, nod gene, Ti plasmid vectors 3666.
plasmid pTiAg63, plasmid pTiA6, induction, tumors, comparison, host range 8866.
- Agrobacterium tumefaciens, (continued)**
serotyping, crown gall, rootstocks, *Malus pumila* 270.
Ti plasmid, opines mediation gene transfer, crown gall, host plants 235.
Ti plasmid tumorigenesis *Solanum nigrum* 2819.
- Agroforestry**
Frankia, inoculation, nodulation, actinorrhizas, *Casuarina* 8149.
nitrogen-fixing bacteria inoculation, rhizosphere 2910.
temperate environments, nitrogen fixation, actinorrhizas, reviews 2915.
- Agropyron**
disease resistance, infection, barley yellow dwarf virus, wheat streak mosaic virus, genetic control 8089.
- Agropyron elongatum**
disease resistance, stem rust, *Puccinia graminis* f.sp. *tritici*, recombination, transfer, *Triticum aestivum* 314.
- Agropyron smithii**
symbiosis, *Glomus*, effects on water relations 6342.
- Agrostis**
blight, *Pythium aphanidermatum*, disease control, metalaxyl, propamocarb, efosite-Al 8134.
- Agrostis palustris**
pathogenicity, *Rhizoctonia cerealis*, USA, North Carolina 3802.
Rhizoctonia solani brown patch, *Rhizoctonia* biological control 6308.
- Agrostis setigera**
granulosis virus, biological control, Pakistan 6079.
- Agrotis ipsilon**
biological control, toxicity, δ -endotoxin, *Bacillus thuringiensis* 5247.
- Air**
filtration, spores removal, *Bacillus subtilis*, fermenters 8504.
sterility, filters, fermenters 8506.
sterility, membrane filtration, fermenters 8505.
- Air circulation**
airborne bacteria, operating theaters 4139.
- Air conditioning**
nosocomial environments, microorganisms, enumeration, methodology 5863.
pipes, corrosion, bacteria, fungi 4677.
water, bacteria films, industries 5849.
- Air pollution**
odor control, trickling filters, use, microorganisms 3200.
- Air spores**
Aspergillus fumigatus, recovery, sewage sludge composting 3213.
fungi, hospitals 5864.
molds, levels, wood processing 8195.
samplers, epidemiology, plant diseases 804.
Streptomyces, preservation, liquid culture methodology 3292.
- Airborne bacteria**
abattoirs 1504.
air circulation, operating theaters 4139.
postoperative infection, role communication, operating theaters, man 4960.
- Airborne microorganisms**
analysis, trains bathrooms 579.
bacteria, dispersal, waste water irrigation 1456.
counting methods 9271.
disease transmission, plant diseases, conferences 6797.
fungi, sampling, measuring techniques, incidence, reviews 803.
housing, cattle 6722.
levels, medical personnel physical activity effects on, operating theaters 6720.
pathogens, wastewater treatment 3186.
survival, *Sirococcus clavigignens-juglandacearum* conidia, *Juglans cinerea* canker 1138.
- Heterobasidion annosum, basidiospores deposition, epidemiology, forests, *Tsuga heterophylla* 8944.
- Akrohomycin**
production, isolation, characterization, *Actinomadura roseoviolacea* 3541.
- Alamethicin**
conformation, I.R. spectroscopy, X-ray diffraction 3140.
- Alangium solivolum**
Microdidiplodia perisporia infection 8017.
- L-Alanine**
ammonium fumarate conversion, immobilized cells, *Escherichia coli*, *Pseudomonas dacunhae* 7.
biosynthesis, aspartate 4-decarboxylase activity, *Pseudomonas dacunhae*, polyurethane immobilization 8525.
synthesis, use enzymes bioreactors 4261.
- D-Alanine aminotransferase**
activity, β -cyano-D-alanine inactivation, temperature role, *Bacillus sphaericus* 7717.
- Alanine carboxypeptidase**
zinc containing, active sites inhibition, heavy metals, β -lactam antibiotics, *Streptomyces* albus 5985.
- L-Alanoline**
growth regulators, *Streptomyces*, production, inhibition, molting, larvae, *Leucania separata* 7774.
- Alantolactone**
antifungal activity 5742.
- D-Alanyl-carboxypeptidase-transpeptidase**
X-ray crystallography, β -lactam antibiotics binding, *Streptomyces* 3457.
- L-Alanyl-L-1-aminoethylphosphonic acid**
+nocardicin A, antibiotic synergism, antibacterial activity, *Pseudomonas aeruginosa* 6554.
- Albania**
Beta vulgaris, plant diseases, beet mosaic virus, etiology 6258.
- Albinism**
Alternaria tenuis, Citrus seedlings, disease control, fungicides 1219.
- Albugo candida**
disease resistance, white rust, association inheritance Ac7 locus, *Brassica napus* 2854.
white rust, *Raphanus sativus*, disease control, mancozeb 2902.
- Albumen**
bactericidal activity, gram-positive bacteria, gram-negative bacteria, temperature, pH effects on, eggs, 4010.
- Albumin**
hydrolysis, proteinase, *Aspergillus awamori* 6016.
hydrolysis, proteinase, immobilized enzymes, *Aspergillus awamori* 4341.
polymers, hepatitis B surface antigen receptors, role liver organotropism, use vaccines production, man, Pan troglodytes 7481.

Alcallegenes

biodegradation, aromatic compounds + halogens, mechanisms, reviews 7826.
biodegradation, nutrient sources, N-(phosphonomethyl)glycine 8684.
chlorophenol biodegradation, wastewater treatment 182.
choline oxidase, U.V. radiation, photoreduction, flavosequinone formation 891.
denitrification, nitrogen cycle, soil, reviews 4655.
fermentation enzymes comparison, *Nocardia opaca*, *Xanthobacter autotrophicus* 150.
isolation, rhizosphere, *Oryza sativa*, nitrogen fixation 5653.
monosodium methanearsonate, metabolism, conversion 1284.
PCB biodegradation, reviews 7827.
proteolytic enzymes, dairy products isolates 1057.
reactors, cutting fluids biodegradation, bacteria identification 178.
+ *Spirillum plauti* mixed culture, nitrofurazone biosynthesis, isolation, antifungal activity 2297.

immobilized cells, hydrogenase, wastewater treatment, tritiated water, nuclear power plants 554.

Alcallegenes eutrophus

biodegradation enzymes, phenol, toluic acid, p-cresol 4422.
chemostats, growth kinetics 9302.
fuel cells, electron transfer, redox potential mediators 5243.
hydrogen dehydrogenase purification 5997.
hydrogen dehydrogenase purification, hydrophobic chromatography methodology 5144.
phosphoribulokinase quaternary structure, cross-linking use 6844.
poly- β -hydroxybutyrate intracellular levels, flow cytometry, monitoring, fermentation 9235.

Alcallegenes faecalis

adenosylhomocysteine, purification, characterization, electrophoresis 7716.
adenosylhomocysteine, use, S-adenosylhomocysteine production 8623.
cytochrome c 554, N.M.R. 3438.
cytochrome c556, N.M.R. 8520.
denitrification, wastewater treatment, industrial effluents 8406.
immobilized cells, β -D-glucosidase activity, role cellulose biodegradation 5190.
nitrifying bacteria, nitrification, denitrification, soil 3966.

polysaccharides, production, batch culture, continuous culture 2629.
polysaccharides, production, characterization 1836.

Alcallegenes faecalis var. myxogenes

β -glucans, batch culture, continuous culture, industrial applications 8621.

Alcohol

concentration relationship, mirin biosynthesis, enzymes preparations efficacy 992.

Alcohol chloroacetates

enantiomers, hydrolysis, *Trichoderma koningii* 2709.

Alcohol dehydrogenase

activity, cell permeability, continuous culture, *Saccharomyces cerevisiae* 3592.
activity, dairy starters, *Streptococcus lactis* 2576.
activity, ethanol production, malic acid conversion, *Saccharomyces cerevisiae* 4409.

activity, measuring techniques, *Acetobacter acetii* 5112.
Adh1 gene, mutation, barley stripe mosaic virus infection, nucleotide sequence, Zea mays 7152.

anaerobic conditions, glycolysis, aeration effects on, *Leuconostoc mesenteroides* 854.

deficient mutant, production, glycerol, ethanol, *Saccharomyces cerevisiae* 3642.
dye-linked, purification, characterization substrate specificity, *Rhodospseudomonas acidophila* 1776.

electrophoresis, ethanol contamination, yeasts 7687.
ethanol utilization, *Escherichia coli* 5972.

heavy metals inhibition, mechanisms, pH effects on, yeasts 7686.

immobilized enzymes, stability, yeasts 4351.

immobilized enzymes, yeasts 1768.

Saccharomycetes putida, use, alcohols determination methodology 29.

surfactants biodegradation 189.

Alcohol dehydrogenase (NAD(P)⁺)

purification, characterization, aromatic compounds biodegradation, *Rhodospseudomonas acidophila* 7692.

Alcohol oxidase

Hansenula polymorpha, preparation, alcohols colorimetry applications 3446.

polyvinyl alcohol biodegradation, *Pseudomonas* 2710.

Alcoholic beverages

fermentation, yeasts, lactic acid bacteria 5273.
mezzal, wort fermentation, *Saccharomyces cerevisiae* 1862.

tepeche, fermentation, *Pichia membranifaciens*, *Saccharomyces cerevisiae* 1898.

Alcohols

colorimetry, applications, *Hansenula polymorpha* alcohol oxidase, preparation 3446.

determination methodology, *Pseudomonas putida* alcohol dehydrogenase use 29.

disinfection 1509.

oxidation, ketones production, *Corynebacterium equi* 8649.

Aldhyde dehydrogenase

anaerobic conditions, glycolysis, aeration effects on, *Leuconostoc mesenteroides* 854.

induction, purification, characterization, *Escherichia coli* 4280.

purification, characterization, reconstitution, membrane proteins, *Acinetobacter calcoaceticus* 4296.

Aldhydes

terpenoids, phytoalexins, *Gossypium barbadense*, accumulation association

Verticillium dahliae wilt 2824.

Aldicarb

antimicrobial activity, soil, microorganisms 1325.

disease control, *Pythium*, dieback, *Daucus carota* 8116.

Aldosterone

derivatives production, *Clostridium paraputrificum* 5197.

Aleyrodes

infects, mung bean yellow mosaic virus, chemical control, insecticides, *Vigna radiata* 2055.

vectors, yellow mosaic virus, plant diseases, *Phaseolus aureus*, disease control 3878.

Alfalfa mosaic virus

enzyme-linked immunosorbent assay detection 7927.

infection, *Lycopersicon esculentum*, disease resistance 3309.

lesions, leaves, *Phaseolus vulgaris*, *Vigna sinensis*, *Nicotiana tabacum* 8857.

plant diseases, *Vicia faba*, Alette effects on *Vicia faba* 4591.

Alginate A

algicides, antifungal activity, antibacterial activity 3136.

Alginate B

algicides, antifungal activity, antibacterial activity 3136.

Algae

= *Acinetobacter calcoaceticus*, biodegradation, octane 2191.
biomass, methanogenic bacteria, digestion (anaerobic), methanogenesis production 2183.

marine environment, association, antibacterial activity, penicillinase

inhibition, effects on, *Staphylococcus aureus*, *Escherichia coli* 8305.

Algin

+ calcium, *Zymomonas mobilis* immobilized cells, ethanol production 2675.

Alginate lyase

Bacillus circulans, purification, characterization 3518.

marine microorganisms, isolation, characterization 3503.

Alginic acid

binding, antibiotics, role, antibiotic resistance, *Pseudomonas aeruginosa* 6411.

biosynthesis, industrial applications, *Pseudomonas*, *Azotobacter* 8618.

immobilization substrates, gel diffusion 4142.

Pseudomonas mendocina, biosynthesis 950.

role, *Pseudomonas aeruginosa* M form defective mutant, lipase stimulation 2570.

Allylic alkanes

biodegradation, metabolism, reviews, microorganisms 8281.

Aliphatic alcohols

effects on oxygen consumption, activated sludge, wastewater treatment 6675.

Aliphatic amines

antiviral activity, herpes simplex virus 1, effects on syncytia formation 4776.

Alka-2,4-dienal

antifungal activity 6305.

Alkaline phosphatase

fixation sites, N.M.R. crystallography, *Escherichia coli* 2587.

detection, use, identification, *Rhizobium leguminosarum* var. *trifolii* 9298.

immobilized enzymes, methodology 3467.

inhibitors production, *Aspergillus*, *Penicillium* 917.

kinetics, computer programs, use, *Escherichia coli* 2624.

Lysobacter enzymogenes, purification, characterization 3519.

production, *Thermus ruber* 6861.

purification, characterization, *Neurospora crassa* 7696.

purification, kinetics, *Capnocytophaga ochracea* 2568.

Alkalinity

monitoring, digestion (anaerobic), sewage sludge 1477.

Alkaline

cordeum vulgare straw pretreatment, effects on bacteria fermentation 1045.

Alkaloids

antifungal activity, leaves, *Solanum aviculare* 8307.

Aspidosperma excelsum, antibacterial activity 5730.

biosynthesis, *Claviceps*, phosphate role 3754.

chemical properties, biological properties, reviews 4241.

ergot, biosynthesis, characterization, *Aspergillus tamaris* 5254.

ergot, detection, grain, flour, use, liquid chromatography 7050.

ergot, *Hyphomycetes aurantius*, biosynthesis, new records 4384.

ergot, production, biotechnology, reviews, fungi 4379.

ergot, production, *Claviceps purpurea* immobilization, methodology 969.

psilocybin, psilocin, baecocystin, isolation, high-performance liquid chromatography, *Psilocybe* 3751.

Alkaliphilic bacteria

cyclomaldextrin glucanotransferase production 7679.

proteases 8613.

Alkanal monooxygenase (FMN-linked)

ATP bioassays, methicillin, antibacterial activity, *Staphylococcus aureus* 4069.

+ γ -hydroxysteroid dehydrogenase + NAD(P)H dehydrogenase (FMN), immobilized enzymes, determination bile, serum 5131.

immobilized enzymes, + dihydrodipicolic acid dehydrogenase + 3 α -hydroxysteroid dehydrogenase, bioluminescence bioassays, bile acids measuring techniques 3482.

Alkanes

biodegradation, metabolism, reviews, microorganisms 8280.

biodegradation, plasmids, genetic analysis, reviews, hydrocarbon-degrading

microorganisms 8284.

n-Alkanes

biodegradation, marine environment isolates, *Penicillium*, yeasts 7310.

Candida lipolytica emulsification 9039.

Lodderomyces metabolism, induction, respiratory enzymes, mitochondria 7307.

metabolism, solubilization, methanol, ethanol, sorbitol oleate, *Candida lipolytica* 1307.

Alkenes

substrate specificity, haloperoxidase, fungi 5187.

7 β -(Z)-2-Alkoxyimino-2-(2-aminothiazol-4-yl)acetamido]-cephalosporin, synthesis, structure-activity relationships 499.

3-Alkylarylalkyl-5-(2,4-dichlorophenyl)-1,3,4-oxadiazole-2-thione, derivatives, antifungal activity, *Curvularia verruciformis*, *Alternaria tenuis* 5521.

n-Alkylcycloalkanes

alicyclic ring, biodegradation, reviews 8277.

Alkylmorpholines

derivatives, antifungal activity 457.

3-[(Alkylthio)methyl]quinoxaline 1-oxide

derivatives, antibacterial activity, *Treponema hyodysenteriae* 4741.

2-Alkylthiocarbapen-2-am-3-carboxylate, synthesis, β -lactam antibiotics analogs 3117.

Alkylthiomethyl-isocholinolinium chloride

antimicrobial activity, spores, fungi, bacteria 9135.

Allelopathy

inhibition nodulation, *Indigofera tinctoria*, *Parthenium hysterophorus* 8987.

Juglans, *Rhizobium*, *Frankia*, nitrogen fixation 3959.

role soil microorganisms, phytotoxins, soil fertility, crops 4636.

soil microorganisms, *Fusarium*, *Aspergillus officinalis* 3831.

Triticum aestivum, aromatic compounds effects on, *Pseudomonas*, *Synechocystis* 373.

racemous degradation effects on 373.

Allergens

extracts, *Aspergillus*, contamination, aflatoxin B1 8722.

extracts, fungi, contamination, aflatoxin B1 3732.

Allergic atelectasis

Cytophaga endotoxins, humidifiers, textile industry, man 1944.

gram-negative bacteria endotoxins, humidifiers, man 1943.

Allergic alveolitis, (continued)

seroepidemiology, drinking water aerosols, actinomycetes, man 4932.
Allium,
 disease resistance, *Sclerotium cepivorum* 8043.
 white rot, *Sclerotium cepivorum*, iprodione resistance 6312.
 white rot, *Sclerotium cepivorum*, pesticide resistance, iprodione, vinclozolin,
 myclobutin, dicloran, quintozena 5529.

Allium cepa

Botrytis infection, ozone effects on 8000.
 bulb rot, *Botrytis allii*, fungicides, disease control 326.
 extracts, antibacterial activity, gram-positive bacteria, gram-negative bacteria
 7370.

growth, stimulation, vesicular-arbuscular mycorrhizas roots, soil volume
 infection, vesicular-arbuscular mycorrhizas 5843.
 growth, vesicular-arbuscular mycorrhizas colonization, phosphorus availability,
 water availability 3947.

heavy metals soil pollution vesicular-arbuscular mycorrhizas 383.
 inoculum production, vesicular-arbuscular mycorrhizas 4632.
 plant breeding, *Botrytis allii* rot disease resistance 5479.
 purple blotch, *Alternaria porri*, factors affecting, pathogenesis 8839.
 purple blotch, *Alternaria porri* nutrient requirements 2037.
 root rot, *Fusarium solani* toxins 2028.

Sclerotium cepivorum white rot disease resistance, screening projects 3866.

Allium porrum

copper uptake, *Glomus mosseae* effects on 384.
 endomycorrhizas effects on growth, association, clays media 2136.
Pseudomonas syringae pv. *symbiotica* infection, case reports 7184.
 roots, growth models, symbiosis, *Glomus mosseae* 3304.
Sclerotium cepivorum white rot disease resistance, screening projects 3866.
 vesicular-arbuscular mycorrhizas inoculation, yield, *Glomus mosseae* 5628.
Allium sativum,
 essential oils, antifungal activity, yeasts 8318.
 extracts, antibacterial activity, gram-positive bacteria, gram-negative bacteria
 7370.

extracts antibacterial activity, *Staphylococcus aureus* growth inhibition 4747.

actinorrhizas, nitrogen fixation, tropical environment, reviews 2914.

Alomyces,
 antibiotics production, *Blastocladiella* 528.

Allophycocyanin,
Anacystis nidulans, isolation methodology 4220.

Allyl alcohol

biodegradation, microorganisms 4434.

Almyourea

measuring techniques, nitrification, lakes sediments 8470.

Alnus,
 actinorrhizas, Frankia, nitrogen fixation, conferences 5100.
 actinorrhizas, Frankia, nitrogen fixation, conferences 8499.
 leaves, biodegradation, *Epicoccum nigrum*, *Cladosporium cladosporioides*, aquatic
 environment 184.

leaves, *Tetrachaetum elegans* biodegradation, pectinolytic enzymes activity,
 calcium concentration effects on 1002.

Alnus cordata

growth stimulation, inoculation, actinorrhizas 8160.

Alnus crispa

seedlings, inoculation, propagation, nodulation, actinorrhizas 8154.

actinorrhizas, Frankia, nodulation, biotyping 8158.

Frankia actinorrhizas, nitrogen fixation 4593.

growth stimulation, inoculation, actinorrhizas 8160.

nitrogen fixation, Frankia 4594.

nodulation, Frankia, actinorrhizas, biotyping 8157.

nodules, actinorrhizas, abscisic acid localization 346.

nodules, actinorrhizas, factors affecting dormancy 347.

nodules, Frankia DNA, isolation, purification 4370.

plantlets, nodulation, Frankia 4601.

reproductive organs, growth, relationship seasonal variations, nitrogenase,
 acetylene reduction, actinorrhizas 8155.

roots, Frankia actinorrhizas 2096.

silviculture, plantations, nitrogen fixation, actinorrhizas 8156.

actinorrhizas, Frankia, nitrogenase activity 4609.

nodulation, Frankia, nitrogen fixation 4610.

nodules, nitrogen fixation, acetylene reduction, measuring techniques,
 nitrogenase, Frankia 8153.

silviculture, hydroponics, nutrient requirements, nitrogen fixation,
 actinorrhizas 8152.

Alnus incana subsp. rugosa,
 actinorrhizas, Frankia, characterization 4598.

Alnus nepalensis,
 symbiosis, Frankia, nitrogen fixation, seasonal variations 6320.

Alnus nitida,
 actinorrhizas, Frankia, nodulation, biotyping 8158.

actinorrhizas, Frankia, ultrastructure, nitrogenase, nitrogen fixation 2969.

nodulation, actinorrhizas, nitrogen fixation, nodules morphology 8151.

Alnus rubra,
 actinorrhizas, nitrogen fixation, nutrient uptake, plantations, silviculture,
Pseudotsuga menziesii 8159.

growth stimulation, inoculation, actinorrhizas 8160.

nodulation, Frankia + *Pseudomonas capsae* 4600.

nodules, Frankia, oxygen effects on nitrogenase activity 4606.

root hairs, actinorrhizas, Frankia 4599.

roots nodules, Frankia nitrogenase activity 6318.

Alpine environments,
 mycorrhizas, Basidiomycetes, ecological distribution, conferences 2546.

tundra, forests, transitions, ecological distribution, ectomycorrhizas 2101.

Alseveria,
Alternaria alternata biosynthesis, water activity, temperature effects on, wheat
 5371.

Alternanthera philoxeroides

herbal medicines, antiviral activity, cell culture, Influenza A virus, influenza
 B virus, Sendai virus 7392.

Alternaria

canker, *Rubus*, USA, Ohio 8846.

cellulolytic enzymes activity 8871.

filtrates effects on, *Citrus limon* pollen germination 2800.

fruit rot, *Malus pumila* 7986.

fruit rot, *Prunus*, disease control, fungicides, new records 339.

hydroxy-hydroperyleneones, structure 8735.

phytooxins, zinnol production 7903.

post-harvest decay, disease control, immersion + captalol, blueberries 3851.

toxins, host-pathogen interactions, plant diseases, reviews 5393.

Alternaria alternata

antifungal activity, diaryl methylphosphonates, structure-activity relationships
 3885.

black point, effects on, *Triticum aestivum*, germination 8800.

black point, fungicides, seed treatments, *Triticale*, effects on 8930.

brown spot disease resistance, inheritance, plant breeding, callus culture,
Nicotiana tabacum 317.

Carthamus tinctorius leafspot, pathology 1144.

charcoal rot, *Helianthus annuus*, etiology 4551.

host-pathogen interactions, in vitro growth, plant cells monosaccharides 7125.

infection, *Anigozanthos*, Australia 2020.

infection, seeds, *Cosmos* 8829.

infection, *Zea mays* seeds, climatic conditions 1992.

leaf blight, *Datura innoxia*, tenuazonic acid isolation, association,
 characterization 5394.

leaf blotch, *Aspergillus varicolor* biological control, *Hordeum vulgare* 2083.

leafspot, *Cassia angustifolia*, *Cassia acutifolia*, new records, India 2040.

leafspot, *Carthamus roseus* 9049.

mutants, cellulase, β -D-glucosidase 3463.

mutants, cellulase, β -D-glucosidase, production 3453.

mycotoxins biosynthesis, water activity, temperature effects on, wheat 5371.

pathogenicity, *Solanum tuberosum*, Israel 6284.

post-harvest decay, potatoes 2822.

protein biosynthesis, isolation 2762.

toxigen biosynthesis, phosphate effects on 5395.

Thiophene derivatives antifungal activity, photoinduction 3060.

Alternaria alternata f.sp. lycopersici

stem canker, *Lycopersicon esculentum*, greenhouses, Greece 8013.

Alternaria brassicae

polygalacturonase, cellulase, biosynthesis 8602.

Alternaria brassicicola

cytokinins secretion, pathogenesis, leaves infection, Brassica 8028.

Alternaria carthami

Carthamus tinctorius leafspot, pathology 1144.

isolates, pathogenicity, *Carthamus tinctorius* 1145.

leaf blight, *Carthamus tinctorius*, factors affecting 5449.

sporulation, induction methodology, media (culture) 4223.

Alternaria carthaeae

leaf blight, disease resistance, plant breeding, *Carthamus tinctorius* 8296.

Alternaria dauci

persistent infection, *Daucus carota* seeds, fungicides, antifungal activity 1226.

Alternaria helianthi

blight, virulence, *Helianthus annuus* 8033.

Alternaria macrospora

blight, transmission (seed), *Gossypium barbadense*, *Gossypium hirsutum* 8037.

infection, *Gossypium barbadense*, fungicides disease control, yield association
 321.

Alternaria mali

toxins, lactam analogs, peptide synthesis 3736.

Alternaria panax

leafspot, *Brassica actinophylla*, *Dizygotheca elegantissima*, *Tupidanthus*
calyptatus 5450.

Alternaria porri

nutrient requirements, purple blotch, *Allium cepa* 2037.

purple blotch, factors affecting, pathogenesis, *Allium cepa* 8839.

Alternaria scorzonerae

leafspot, pathology, *Scorzonera hispanica* 8018.

Alternaria solani

altersolanol A, phytotoxicity 2813.

antimicrobial activity, nematocides 1325.

Aureobasidium pullulans antagonism, use biological control, *Lycopersicon*
esculentum 2080.

leaf blight, *Streptomyces griseus* interaction, *Capsicum annuum* 2007.

phytooxins, structure 8738.

tetrahydroaltersolanol B structure, new records 3576.

Alternaria tagetis

Tagetes blight, pathogenicity 1140.

Alternaria tenuis

root rot disease resistance, inheritance, *Triticum* 2885.

Alternaria tenuis

albinism, *Citrus* seedlings, disease control, fungicides 1219.

antifungal activity,

3-arylaminoethyl-5-(2,4-dichlorophenyl)-1,3,4-oxadiazole-2-thione,
 3-alkylarylalkyl-5-(2,4-dichlorophenyl)-1,3,4-oxadiazole-2-thione, derivatives
 5521.

disease control, *Lobelia erinus*, seed treatments, steam 2062.

infection, *Eucalyptus* hybrids, symptoms, new records 2118.

Alternaria tenuissima

mancozebe + curzate antifungal activity 2085.

Alternaria vitis

foliar diseases, seasonal variations, *Vitis vinifera* 8016.

Alternariol

ethers, *Alternaria alternata* biosynthesis, water activity, temperature effects
 on, wheat 5371.

Alteromonas

trimethylamine-N-oxide reductase induction, localization 936.

Alttersolanol A

Alternaria solani, phytotoxicity 2813.

Alumina

alcohol dehydrogenase immobilization, yeasts 1768.

Aluminum

effects on *Rhizobium leguminosarum* var. *trifolii* inoculation, nodulation,
Trifolium repens 7278.

reactors, liquids, *Pseudomonas fluorescens* fouling organisms, films formation
 2382.

surfaces, disinfectants antibacterial activity, *Pseudomonas aeruginosa* 5862.

Subject Index

- Aluminum, (continued)**
toxicity, *Rhizobium leguminosarum* var. *trifolii*, nodulation, soils (acid),
trifolium repens 7279.
- Aluminum oxide,**
immobilization, subtilisin, *Bacillus subtilis* 7734.
- Aluminum phosphate,**
solubilization, *Pseudomonas striata*, *Aspergillus awamori*, soil 6350.
utilization, soil microorganisms, phosphorus sources 2151.
- Aluminum sulfate,**
treatment, eutrophic environments, lakes, role, removal, inactivation, fecal
coliforms, *Streptococcus* 9252.
- Alysicarpus monilifer,**
Uromyces alysicarpi rust, India 2036.
- Amanita,**
isolation, pure culture, methodology, nutrient requirements, reviews 829.
- Amanita muscaria,**
seedlings inoculation, roots colonization, spatial distribution, soil, *Betula*
5556.
- Amanita phalloides,**
amatoxins, phallotoxins, reviews 2759.
amanitamine analogs, radioactive labelling, peptide synthesis 7664.
mushroom poisoning, man 2735.
phalloidin, thioesters cross-linking, conformation, N.M.R., C.D. 3755.
- Amanita subulipes,**
 α -amanitin, phalloidin, fluorimetry 5386.
- Amanita virosa,**
toxins, peptide synthesis, biological activity 7906.
- α -Amanitin,**
fluorimetry, *Amanita subulipes* 5386.
- Amanitidine,**
foliar applications, effects on cowpea chlorotic mottle virus infectivity,
symptoms, *Vigna unguiculata* 3903.
- Amaranthus palmeri,**
latent infection, *Euphorbia lathyris*, weeds, USA, Arizona 8044.
- Ametoxina,**
reviews 2759.
- Amebe,**
population dynamics, humus enrichment, fungi effects on 4629.
population dynamics, suppression, take-all, *Triticum aestivum* 1173.
- American hop latent virus,**
incidence, *Humulus lupulus*, Germany, Fed. Rep. 6260.
- Amea test,**
data, *Salmonella* genetic drift, colonies, strains variance effects on 7597.
mutagenicity, industrial effluents, pulp mills, paper mills, removal, wastewater
treatment 4903.
mutagenicity testing, aflatoxin B1 3738.
Salmonella typhimurium, plasmid pK4101, effects on, DNA repair 3328.
variability, *Salmonella typhimurium* strains, genetic drift 5914.
variability, *Salmonella typhimurium* strains, genetic drift, analysis 5915.
variability, *Salmonella typhimurium* strains, genetic drift, statistical analysis
5916.
- Amidase,**
acetofenitric biodegradation, *Brevibacterium* 3665.
isolation, characterization, *Erwinia carlotovora* 1756.
nitriles conversion, organic acids production, factors affecting, *Brevibacterium*
4271.
- Amides,**
3-(5-nitro-2-furyl)acrylic acid, antimicrobial activity 6488.
- Amifoxacin,**
antibacterial activity, *Pseudomonas aeruginosa* 7377.
- Amikacin,**
agar diffusion test, *Mycobacterium fortuitum*, *Mycobacterium chelonae*,
differentiation 1405.
antibacterial activity, clinical isolates 7444.
antibacterial resistance, cross-resistance, cefotaxime, clinical isolates, *Serratia*
marcescens 4687.
antibiotic sensitivity testing, AutoMicrobic test, *Pseudomonas aeruginosa* 5778.
antibiotic sensitivity testing, disc-diffusion test, *Pseudomonas aeruginosa*,
statistical analysis 479.
antibiotic sensitivity testing, *Proteus penneri* 9162.
antibiotic synergism, aztreonam, piperacillin, ticarcillin, antibiotic
sensitivity testing, *Pseudomonas aeruginosa*, *Pseudomonas cepacia*, clinical
isolates, cystic fibrosis, children 3170.
antibiotic synergism, cefotaxime, *Streptococcus* 1382.
antibiotic synergism, cotrimoxazole, cefotaxime, *Nocardia asteroides* 480.
antibiotic synergism, N-formimidoyl thienamycin, antibacterial activity,
Streptococcus faecalis, *Streptococcus faecium* 4811.
 \pm aztreonam, \pm cefeprozone, serum bactericidal activity, *Escherichia*
coli, *Klebsiella pneumoniae*, *Serratia marcescens*, *Pseudomonas aeruginosa* 8344.
 \pm aztreonam, antibacterial activity, gram-negative bacilli 3156.
bactericidal activity, cephalosporins, enhancement, Enterobacteriaceae, clinical
isolates 6513.
comparison, antibiotic K-4619, antibacterial activity 7479.
 \pm β -lactam antibiotics, antibiotic synergism, antibacterial activity 1391.
 \pm β -lactam antibiotics, antibiotic synergism, antibacterial activity,
Enterobacteriaceae 9165.
 \pm mezlocillin, antibacterial activity, bactericidal activity, antibiotic
antagonism, antibiotic synergism 7412.
- Amine dehydrogenase,**
purification, characterization, methylotrophic bacteria 3514.
- Amines,**
antibacterial activity 6468.
detection, meat products quality, bacteria food contamination 6196.
levels, milk, lactic acid bacteria, dairy starters 5962.
measuring techniques, fluorometry, yeasts, bacteria, biotechnology 7556.
- Amino acid composition,**
asparaginase, *Escherichia coli* 4322.
bagasse hydrolysates, use, carbon sources, fermentation 8677.
cytochrome c, *Ustilago* 869.
dihydrolipoamide dehydrogenase, 2-oxoisovalerate dehydrogenase, subunits,
Pseudomonas putida, comparison *Escherichia coli* 6831.
gas chromatography, media (culture) 6733.
homogeneity, enterotoxins, *Escherichia coli* 6212.
iturin A, *Bacillus subtilis* 2301.
meals, soybeans + corn, fermentation effects on, lactic acid bacteria 5357.
media (culture) 1536.
- Amino acid composition, (continued)**
neurotoxins, *Clostridium botulinum* 7909.
phytooxins, *Pseudomonas syringae* pv. *phaseolicola* 1940.
Pisum sativum, plant diseases, cucumber mosaic virus, bean yellow mosaic virus
6227.
single-cell protein, *Fusarium oxysporum* f.sp. *lini*, food industry, industrial
wastes 1729.
single-cell protein, thermophilic fungi 860.
single-cell protein, whey fermentation, yeasts 1722.
Vigna unguiculata leaves, *Myrothecium roridum* infection 1977.
- Amino acid decarboxylase,**
detection, methodology, bacteria 772.
- Amino acid sequence,**
ADP-ribosyl transferase, biosynthesis, comparison, *Escherichia coli*, *Vibrio*
cholerae 7120.
anconavin, isolation, actinomycetes 2290.
aspartate aminotransferase, *Escherichia coli*, comparison, pigs 6843.
calmodulin, structure-activity relationships, *Dictyostelium discoideum* comparison
catie 5992.
cellulase, exo-cellulohydrolase, homology, *Trichoderma reesei* 3509.
cellulase, purification, *Schizophyllum commune*, characterization 7728.
cytochrome c oxidase, *Paracoccus denitrificans*, homology *mitochondria* 897.
cytochrome P-450, putidaredoxin, camphor 5-monooxygenase, *Pseudomonas putida*
6000.
determination, use *Lysozyme* enzymogenes proteinase 939.
exo-1,4- α -D-glucosidase, *Aspergillus niger* 5980.
exo-1,4- α -D-glucosidase, *Aspergillus niger* 7724.
exo-cellulohydrolase, *Trichoderma reesei* 3510.
fatty acid synthetase active sites peptides, *Cephalosporium caerulans*,
comparison, *Saccharomyces cerevisiae* 8529.
fatty acid synthetase, *Escherichia coli* 900.
 δ -hemolysin, *Staphylococcus aureus* 5390.
homology, *Escherichia coli*, dihydrolipoamide dehydrogenase, glutathione reductase
(NAD(P)H), evolution, erythrocytes, man 6004.
homology, methionyl-tRNA synthetase, *Escherichia coli*, tyrosyl-tRNA synthetase,
Bacillus stearothermophilus 2621.
 α -mating factor, *Saccharomyces kluyveri* 3410.
predictions, toxins, use nucleotide sequence, *Corynebacterium diphtheriae* 7912.
serine proteinase, active sites flanking regions, *Bacillus thuringiensis*
comparison *Bacillus cereus* 5153.
siderophores, *Pseudomonas* 8518.
Staphylococcus aureus enterotoxin C3 8751.
N-terminus, asparaginase, *Escherichia coli* 4322.
toxins, nucleotide sequence, genes, *Corynebacterium diphtheriae* 7119.
Vibrio cholerae toxins A1-subunit ADP-ribosylation sites 1085.
- Amino acids,**
antifungal activity, Trichophyton mentagrophytes, microsporium gypseum 9106.
biosynthesis, Flavobacterium aminogenes 3438.
biosynthesis, gene regulation, microorganisms 3371.
carbon sources, tyactone, biosynthesis, *Streptomyces fradiae* 3162.
effects on, *Aspergillus flavus*, *Aspergillus parasiticus*, growth, aflatoxins
production 215.
effects on echinomycin biosynthesis, *Streptomyces ochinatus* 520.
effects on, *Propionibacterium shermanii*, *Propionibacterium*, cyanocobalamin,
biosynthesis 146.
excretion, soil, *Azotobacter vinelandii* 1266.
hemolymph, pathogens effects on, larvae, *Spodoptera littoralis*, *Bacillus*
thuringiensis 6912.
isotopes, radioactive labelling, use L-methionine γ -lyase, *Pseudomonas putida*
4311.
levels, association, pathogenesis, papaya leaf reduction virus plant diseases,
Carica papaya 8812.
nutrient requirements, bacitracin biosynthesis, *Bacillus licheniformis* 1403.
nutrient requirements, media (culture), *Bacillus thuringiensis* subsp. *galleriae*
7483.
nutrient sources, *Aspergillus* aflatoxins biosynthesis, mycelia growth 7074.
overproduction, mutants, transformation, *Brevibacterium lactofermentum* 5116.
precursors, antibiotic TA biosynthesis, *Myxococcus xanthus* 1421.
production, use hydrocarbons, methane, metabolism, methylotrophic bacteria 5706.
proteinase biosynthesis, effects on, *Bacillus thuringiensis* 918.
proteinase biosynthesis, effects on, *Bacillus thuringiensis* 6029.
Saccharomyces cerevisiae auxotrophy, phenethyl alcohol sensitivity 3062.
sulfur, selenium containing, L-methionine γ -lyase synthesis, *Pseudomonas*
putida 65.
N-terminus, synthesis use, nikkomycin peptide synthesis, *Streptomyces tendae*
8377.
- inhibition, β -lactam antibiotics antibacterial activity, *Escherichia coli*
9064.
- Amino groups,**
antibacterial agents effects on, bacteria 9094.
- 5'-Amino-2,5'-diideoxy-5'-iodouridine,**
derivatives, antiviral activity, herpes simplex virus 1 4025.
- Amino acid racemase,**
kinetics, S-(N-methylthiocarbamoyl)-D,L-cysteine inactivation, *Pseudomonas putida*
5151.
- 8-Amino-2-carboxylamino acids,**
antimicrobial activity 9142.
- 4-Amino-3-chloro-2-pentenediol acid,**
production, isolation, *Streptomyces*, characterization 6562.
- 3-Amino-5-hydroxybenzoic acid,**
association, actamycin biosynthesis, *Streptomyces* 1444.
- 7-Amino-7-methyl cepheins,**
synthesis 7427.
- Aminocyl-tRNA synthetase,**
sedimentation, yeasts 1801.
- Aminoacylase,**
immobilized enzymes, stability, kinetics 80.
- 6-(L- α -Aminoacidipolyl)-L-cysteine-N-hydroxy-D-valine,**
Cephalosporium acremonium conversion 5777.
- 2-Aminobenzoate,**
biodegradation, anaerobic conditions, denitrifying bacteria 6172.

- L- α -Aminocaprolactam hydrolase**, activity, detection methodology, *Cryptococcus* 6822.
- activity, lysine production, *Cryptococcus* 6034.**
- Aminocycloitol phosphotransferase**, gene mapping, plasmids, antibiotic resistance, hygromycin B, *Escherichia coli* 427.
- Aminodesacetoxy-cephalosporinic acid**, production, *Escherichia coli*, immobilized cells 506.
- 3-(1'-Aminoethoxy)-bicyclo[2,2,1]heptane chlorohydrate**, antibiotic activity, influenza A virus resistance development 4701.
- Aminoglycoside 2'-O-nucleotidyltransferase**, activity, relationship, aminoglycoside antibiotics, antibiotic resistance, *Escherichia coli* 3028.
- Aminoglycoside acetyltransferase**, correlation, antibiotic resistance, aminoglycoside antibiotics, *Mycobacterium fortuitum* 7342.
- Aminoglycoside antibiotics**, antibacterial activity 2304.
- antibacterial activity, books 8498.**
- antibacterial activity, clinical isolates 7444.**
- antibacterial activity determination, counting methods 2239.**
- antibacterial activity, lipids, potentiation, *Streptococcus mutans* 9181.**
- antibacterial activity, *Staphylococcus aureus*, *Staphylococcus epidermidis*, *Streptococcus faecalis* 4815.**
- antibacterial antagonism, antibiotic synergism, β -lactam antibiotics, bactericidal activity, *Pseudomonas aeruginosa* 7403.**
- antibiotic K-4619, antibacterial activity, gram-negative bacteria, gram-positive bacteria 7479.**
- antibiotic resistance, actinomycetes 3022.**
- antibiotic resistance, bacteria, reviews 9051.**
- antibiotic resistance, clinical isolates, Enterobacteriaceae, *Pseudomonas aeruginosa*, Turkey, USA 2195.**
- antibiotic resistance, correlation, aminoglycoside acetyltransferase, plasmids, *Mycobacterium fortuitum* 7342.**
- antibiotic resistance, cross-resistance, β -lactam antibiotics, clinical isolates, *Serratia marcescens* 4687.**
- antibiotic resistance, relationship, aminoglycoside 2'-O-nucleotidyltransferase activity, *Escherichia coli* 3028.**
- antibiotic resistance, *Streptococcus faecalis* 7330.**
- antibiotic sensitivity testing, disc-diffusion test, *Pseudomonas aeruginosa*, statistical analysis 479.**
- antibiotic sensitivity testing, gram-negative bacteria, isolation, heart surgery specimens 3107.**
- antibiotic sensitivity testing, inoculum size effects on, *Neisseria gonorrhoeae* 7426.**
- antibiotic synergism, β -lactam antibiotics, antibiotic sensitivity testing, *Pseudomonas aeruginosa* 7417.**
- antibiotic synergism, cefotaxime, *Streptococcus* 1382.**
- biosynthesis, actinomycetes, antibiotic resistance relationship 3016.**
- chemical modification, kanamycin 6'-acetyltransferase activity, *Escherichia coli* 5714.**
- antibiotic resistance correlation 5714.**
- dilution tests, *Pseudomonas aeruginosa* 1408.**
- inactivation, β -lactam antibiotics, detection, enzyme immunoassay 4861.**
- inhibition DNA biosynthesis initiation, mechanisms, *Escherichia coli* 7468.**
- β -lactam antibiotics, antibiotic synergism, *Pseudomonas aeruginosa* 4807.**
- measurements, photometry 7464.**
- Methanococcus vannielii* ribosomes sensitivity 2237.**
- outer membranes interaction, *Pseudomonas aeruginosa* 9176.**
- production, genetic engineering, actinomycetes 5759.**
- 3-Aminomidazolo[4,5-c]triazine**, derivatives, synthesis, antimycobacterial agents 2274.
- 3-Aminomidazolo[4,5-c]triazine**, derivatives, synthesis, antimycobacterial agents 2274.
- 5-Aminolevulinate synthase**, mediation, betaine, stimulation, cyanocobalamin, biosynthesis, *Pseudomonas denitrificans* 6094.
- 6-Aminopenicillanic acid**, Enterobacter cloacae, β -lactamase inhibition 2263.
- production, benzylpenicillin deacylation, penicillin amidase activity, bioreactors 6531.**
- production, Penicillium chrysogenum 4050.**
- 6-Aminopenicillanic acid-acetyltransferase**, Penicillium chrysogenum, purification, biosynthesis, penicillin G, penicillin V 3490.
- Aminopeptidase**, assays, identification, gram-positive bacteria, gram-negative bacteria 7576.
- antibiotic resistance, measurements, biological activity, activated sludge 4094.**
- purification, characterization, Mycoplasma salinarum 5996.**
- purification, methodology, Bacillus thuringiensis, Aspergillus oryzae 5136.**
- Aminopeptidase (cytosol)**, koi, assays, use L-glutamate oxidase, *Aspergillus oryzae* 7853.
- Aminopeptidase (microsomal)**, activity, aspergillomarinase A, aspergillomarinase B inhibition, *Aspergillus oryzae* 3734.
- Aminophenylmercury acetate**, preservatives, prevention, biodegradation, cellulose, soil microorganisms 7302.
- Ammonia**, biosynthesis, *Pseudomonas fluorescens* growth, nitrogen sources, cyanide biodegradation 1877.
- disease control, Phymatrichum omnivorum, root rot, Gossypium hirsutum 5523.**
- electrodes, Nitrosomonas, Nitrobacter, immobilized cells 767.**
- +heat, decontamination, aflatoxin B1, corn 7889.**
- heterocyclic derivatives, DNA binding, inhibition, phage λ replication, *Escherichia coli* 4030.**
- preservation, fermentation, corn silage 2744.**
- pretreatment, effects on fermentation, Zea mays silage 4467.**
- pretreatment, straw, biodegradation, Chaetomium cellulolyticum, liquid culture 2696.**
- +propionic acid, preservation, spoilage, bacteria, fungi, corn 7025.**
- Saccharum officinale fermentation, yeasts, Lactobacillus, effects on 2754.**
- treatment, straw, biodegradation 6953.**
- volatilization, urease inhibitors, fertilizer applications 1285.**
- waste water, chemical analysis, electrodes, immobilized cells 768.**
- Ammonification**, iprodione effects on, soil microorganisms 1286.
- nitrification, reactors, wastewater treatment 2354.**
- Ammonifying bacteria**, disinfection efficacy, detection methodology, use filter paper 7542.
- Ammonium**, association, glass, use, disinfection, water 7527.
- effects on chloramphenicol biosynthesis, Streptomyces venezuelae 8355.**
- enhancement, Saccharomyces cerevisiae, fermentation, characterization 7810.**
- fertilizer applications, stimulation phosphate, nutrient uptake, ectomycorrhizas, Pseudotsuga menziesii 5574.**
- industrial effluents, toxicity, methanogenic bacteria, digestion (anaerobic) 1483.**
- inhibition, tylosin biosynthesis, Streptomyces fradiae 3138.**
- levels, nitrification inhibitors effects on, nitrifying bacteria, soil 7273.**
- nitrate ratio, effects on Glomus fasciculatum, phosphorus, nutrient uptake, Chrysanthemum morifolium 5842.**
- production, urea hydrolysis, urease, fertilizer applications, soil microorganisms 6383.**
- salts, heptacain, antibacterial activity, Staphylococcus aureus 7541.**
- stimulation fermentation, ethanol production, Saccharomyces cerevisiae 3626.**
- stimulation fermentation, ubiquinone production, Agrobacterium 7681.**
- Ammonium bicarbonate**, comparison, carbon dioxide, use, Transgrow media, *Neisseria gonorrhoeae* isolation 3288.
- Ammonium chloride**, inhibition, biotransgenesis, digestion (anaerobic) 6693.
- Ammonium fumarate**, conversion L-alanine, immobilized cells, *Escherichia coli*, *Pseudomonas dacunhae* 7.
- Ammonium hydroxide**, detoxification methodology, aflatoxins, food contamination, Gossypium hirsutum seeds meals 7081.
- effects on, extraction, cooking, aflatoxins, peanuts, flour 3749.**
- Ammonium nitrate**, effects on nitrogen fixation, Rhizobium leguminosarum 5854.
- Ammonium phosphate**, effects on yeasts growth, association wine 7869.
- Ammonium sulfate**, fertilizer applications, organic matter accumulation, soil microorganisms activity, soil structure, pasture 5640.
- nitrogen sources, nutrient uptake, vesicular-arbuscular mycorrhizas effects on, Sorghum bicolor 8215.**
- Ammonium tartrate**, glucose, degradation, media (culture), liquid culture, sterilization, autoclaves 8490.
- Ammonium-5-tungsto-2-antimonate**, antiviral activity, bovine rhinotracheitis virus, pseudorabies virus, rotavirus (bovine) 6471.
- Amniotic fluid**, antibacterial activity, Streptococcus group B 2214.
- Amoxicillin**, antibiotic resistance, *Escherichia coli*, isolation, chickens 3032.
- antibiotic resistance, intestinal microflora, *Escherichia coli*, man 6419.**
- antibiotic sensitivity testing, *Neisseria gonorrhoeae* 4804.**
- +clavulanic acid, antibacterial activity, antibiotic resistance, clinical isolates, gram-negative bacteria, gram-positive bacteria 7438.**
- +clavulanic acid, antibacterial activity, Klebsiella aerogenes, *Escherichia coli* 4838.**
- \pm clavulanic acid, antibiotic sensitivity testing, urinary tract, infection, bacteria, clinical isolates 6525.**
- comparison, antibiotic FK 027, antibacterial activity, bacteria 2316.**
- mass spectroscopy 2267.**
- production, β -lactamase deficient mutant, *Pseudomonas melanogenum* 3104.**
- Ampelepteria proflera**, leaves, extracts, antiviral activity, tobacco mosaic virus, cucumber mosaic virus 8333.
- Amphotericin**, +metacycline, antibiotic synergism, *Candida albicans* 7378.
- Amphotericin B**, antibiotic sensitivity testing, fungi, radiometry 2280.
- antifungal activity, *Candida* 4753.**
- antifungal activity, *Candida albicans* 4858.**
- antifungal activity, *Candida albicans*, antioxidants stabilization 1406.**
- antifungal activity, *Candidobolus*, *Basidiobolus* 7380.**
- +antifungal agents+rifampicin, antifungal activity, Aspergillus 5785.**
- bioassays, spectrophotometry, *Streptomyces nodosus* 4857.**
- Cryptococcus neoformans* growth inhibition 1407.**
- drug sensitivity testing, *Candida* 5735.**
- effects on *Candida albicans* dry matter quantification 3113.**
- +rifampicin, antifungal activity, experimental infection, candidiasis, guinea-pigs 8365.**
- toxicity, *Candida albicans* 4859.**
- Ampicillin**, antibacterial activity, *Pseudomonas aeruginosa* 7377.
- antibacterial activity, *Streptococcus faecalis*, *Streptococcus faecium* 4811.**
- antibiotic resistance, antibiotic sensitivity testing, Haemophilus influenzae, clinical isolates, incidence, Spain 6420.**
- antibiotic resistance, clinical isolates, *Escherichia coli* 4004.**
- antibiotic resistance, clinical isolates, Haemophilus influenzae 9077.**
- antibiotic resistance, epidemiology, Haemophilus influenzae, meningitis, man 7314.**
- antibiotic resistance, Haemophilus influenzae, clinical isolates, disseminated infection, children 441.**
- antibiotic resistance, penicillin-binding protein, membrane permeability, Haemophilus influenzae 7338.**
- antibiotic resistance, Salmonella typhi, mediation, plasmids 7322.**
- antibiotic resistance, Vibrio 8293.**
- antibiotic sensitivity testing, amoxycillin, Enterobacter cloacae, Citrobacter freundii, *Serratia marcescens* 2198.**
- antibiotic sensitivity testing, clavulanic acid effects on, Bacteroides fragilis 9164.**
- antibiotic sensitivity testing, *Escherichia coli* 7440.**
- antibiotic sensitivity testing, Haemophilus influenzae, MS-2 system 498.**
- antibiotic sensitivity testing, Leptospira 1373.**
- antibiotic sensitivity testing, *Neisseria gonorrhoeae* 4804.**

Ampicillin, (continued)

- antibiotic sensitivity testing, *Pseudomonas aeruginosa*, clinical isolates 7416.
- antibiotic sensitivity testing, *Streptococcus faecalis* 4808.
- bactericidal activity, *Legionella pneumophila*, characterization 7451.
- chemical modification, synthesis, triazole, isoxazole, antibacterial activity 1398.
- Citrobacter freundii* resistance, transfer 6416.
- Clostridium perfringens drug sensitivity testing 3085.
- +colistin interaction, *Escherichia coli*, ampicillin resistance 5772.
- drug resistance, clinical isolates, *Haemophilus influenzae*, *Haemophilus parainfluenzae* 3335.
- Escherichia coli* resistance, ampicillin+colistin interaction 5772.
- esters, antibacterial activity, gram-negative bacteria, *Staphylococcus aureus* 2266.
- esters, hydrolysis, *Micrococcus luteus*, bioassays, factors affecting 2265.
- +gentamicin, antibacterial activity, *Streptococcus faecalis* endocarditis, animal models 4838.
- leukocytes (polymorphonuclear) penetration, antibacterial activity, man 492.
- mass spectroscopy 2267.
- resistance, β -lactamase activity, Enterobacteriaceae 4704.
- +rifampicin, antibiotic synergism, antibacterial activity, *Haemophilus influenzae* type B 9166.
- Streptococcus* group B susceptibility 1381.
- +streptomycin, +chloramphenicol, antibiotic synergism, antibacterial activity, *Pseudomonas aeruginosa* 8349.
- +sublactam antibacterial activity, agar diffusion test quality control 4834.
- +sublactam, antibacterial activity, *Escherichia coli*, *Klebsiella aerogenes* 4843.
- synergism, metronidazole, tinidazole, antibacterial activity, anaerobic bacteria 7368.

Amprolism,

- effects, plasmid pKM101, antibiotic resistance, *Escherichia coli*, *Salmonella typhimurium* 7324.

Amylase,

- activity, proteinase, *Mucor*, *Endothia parasitica* 8599.
- Lactobacillus*, biochemistry, chickens crop isolates 1815.
- production, industrial strains, morphology, *Bacillus subtilis* 6880.

 α -Amylase,

- activity, clays, soil properties, grasslands 403.
- activity, fungi, measuring techniques 7719.
- Aspergillus flavus*, activity, association, hydrocarbons carbon sources comparison 2189.
- assays, use starch degradation products, *Aspergillus oryzae* 7677.
- Bacillus stearothermophilus*, *Xanthomonas campestris*, heat inactivation, ultrahigh temperature sterilization, dairy products 6974.
- bacteria, measuring techniques, p-nitrophenylglycosides substrates 1794.
- bacteria, starch hydrolysis, sucrose production, industries 53.
- biosynthesis, *Bacillus licheniformis*, sporulation correlation 1821.
- biotechnology, reviews, microorganisms 2596.
- exo-1,4- α -D-glucosidase, production, optimization, carbohydrates hydrolysis, fungi 5193.
- fungi, bacteria, desizing, fabrics, textile industry 52.
- fungi, immobilized enzymes systems, corn syrup production 208.
- hydrolysis oligosaccharides, *Thermoactinomyces vulgaris* 1777.
- immobilized enzymes, kinetics, *Bacillus subtilis* 1772.
- inactivation, immobilized enzymes, *Bacillus subtilis*, factors affecting 881.
- mice, biosynthesis, cloning vectors, gene expression, *Saccharomyces cerevisiae* 5169.
- microorganisms, starch hydrolysis, food industry 51.
- production, continuous culture, *Bacillus licheniformis* 6035.
- production, nutrient requirements, *Bacillus pasteurii* 7758.
- production, purification, characterization, *Aspergillus foetidus* 6012.
- production, yeasts 8546.
- purification, characterization, mutants, transformation, *Bacillus subtilis* 4287.
- purification, characterization, production maltotetraose, maltopentaose, *Bacillus circulans* 1763.
- purification, characterization, thermal stability, *Thermoactinomyces* 7695.
- purification, characterization, thermophilic microorganisms, *Bacillus* 7705.
- reactivation, immobilized enzymes 4301.
- soy sauce production, role, *Aspergillus oryzae* 3697.
- starch fermentation, ethanol production 8862.
- starch hydrolysis, flour, baking industries, fungi 198.

 β -Amylase,

- biotechnology, reviews, microorganisms 2596.
- maltose, glucose production, reviews, α -D-glucosidase applications, *Bacillus licheniformis*, *Bacillus amyliolyticus* 4360.
- production, purification, *Bacillus subtilis* 940.
- purification, characterization, thermal stability, *Thermoactinomyces* 3450.
- purification, characterization, thermophilic microorganisms, *Bacillus* 7705.

Amylo-1,6-glucosidase,

- Aspergillus niger*, recovery, fermentation, wheat 204.

Amylolytic enzymes,

- activity, soil microorganisms, soil types 1270.
- pretreatment, starch, sugars fermentation, ethanol production, *Zymomonas mobilis* 8663.
- production, yeasts 8546.

Anabaena torulosa,

- comparison, *Plectononema boryanum*, sodium effects on nitrogen fixation 6381.

Anacardium occidentale,

- yield, phosphate nutrient uptake, spores levels, soils (sandy), vesicular-arbuscular mycorrhizas 7260.

Anacyetia nidulans,

- allophycocyanin, isolation methodology 4220.

Anaerobic bacteria,

- antibacterial activity, amoxicillin-clavulanic acid, antibiotic resistance 7438.
- antibacterial activity, bicyclomycin 3164.
- antibacterial activity, cefiparime, apalcillin 3101.
- antibacterial activity, metronidazole, tinidazole, synergism, ampicillin, doxycycline, cotrimoxazole 7366.
- antibacterial activity, piperacillin 8539.
- antibiotic sensitivity testing, antibiotic resistance, clinical isolates, eye infection, man 5757.
- antibiotic sensitivity testing, ciprofloxacin 4730.
- antibiotic sensitivity testing, methodology, comparison 7408.
- antibiotic sensitivity testing, plasmids transfer, reviews 7335.
- antibiotic susceptibility testing, incubation conditions 2244.
- aromatic compounds biodegradation, dehalogenation pathways 2701.

Anaerobic bacteria, (continued)

- blood culture, media (isolation) 2482.
- cell culture equipment 7618.
- chlorotetracycline antibiotic resistance, animal isolates, chlorotetracycline containing feeds, pigs 2197.
- clinical isolates, antibiotic sensitivity testing, cefoxitin, metronidazole, clindamycin 6549.
- clinical isolates, API test, Minitek test 7595.
- clinical isolates, drug sensitivity testing, metronidazole, ornidazole 4731.
- clinical isolates, hysterectomy postoperative infection, antibiotic sensitivity testing, man 9177.
- culture systems, identification, media (transport), reviews 7610.
- drug sensitivity testing, inoculum preparation 4791.
- drug sensitivity testing, inoculum preparations 1334.
- drug sensitivity testing, Micro-Media Enteric System 1329.
- fermentation, anaerobic conditions 7651.
- fermentation, biotechnology 2726.
- fermentation, feedback inhibition 4251.
- gelatin agar media methodology, use, gelatinase detection 2457.
- identification, cultivation techniques 5045.
- identification methodology, blood culture, man 1583.
- identification methodology, agar media comparison 1644.
- identification methodology comparison 1657.
- identification, use, media (culture), methodology 2519.
- indole detection, reagents methodology 1664.
- inflammatory diseases, oral cavity, antibiotics sensitivity, man 7405.
- isolation, identification, methodology 2489.
- media (culture), anaerobic conditions, production, association, magnesium 7623.
- metabolism, carbon monoxide, carbon dioxide, methanol, fuels production 5312.
- methanogenesis, mass energy balance 4679.
- metronidazole, antibacterial activity, treatment, infection 453.
- penicillin resistance 432.
- phenylacetic acid biosynthesis 855.
- recovery, bottles methodology comparison, clinical isolates 5038.
- rumen, rumenation, inhibition, reducing agents, titanium citrate, media (culture) 9301.
- spoilage, pasteurization, packaging, cold storage, shelf life, seafood, *Crassostrea virginica* 8720.
- spoilage, vacuum packaging nitrogen packaging, luncheon meat 8715.

Anaerobic conditions,

- 2-nitrobenzoate biodegradation, denitrifying bacteria 6172.
- Candida utilize xylene fermentation, effects on ethanol production 991.
- cell culture, *Clostridium butyricum*, *Clostridium acetobutylicum* 5919.
- cell culture equipment, anaerobic bacteria 7618.
- composting, sewage sludge, methanogenesis 4102.
- denitrification, pollutants fermentation 5670.
- effects on, liquid culture, detection, bacteremia, fungemia 2514.
- fermentation 7651.
- filters, removal kinetics, fecal coliforms, phages, wastewater treatment 1474.
- glycolysis, aeration effects on, *Launconostoc mesenteroides* 854.
- hydroxycholeic acid conversion, *Pseudomonas*, products identification 876.
- methanogenesis, films, bioreactors, wastewater treatment, thermophilic bacteria 4925.
- nitrogen, photosensitivity, U.V. radiation, *Haemophilus influenzae* 4749.
- phototrophic bacteria storage, nitrogen (liquid) 4215.
- production, association, magnesium, media (culture), anaerobic bacteria 7623.
- Pseudomonas*, cholic acid biodegradation 4427.
- Pseudomonas* deoxycholic acid biodegradation 6154.
- reactors, methanogenesis films, ultrastructure 6397.
- storage, effects on soil microorganisms, soil, use land reclamation 5688.
- wastewater treatment, industrial effluents, methanogenesis, acid production 9227.

Anaerobic environments,

- Neisseria gonorrhoeae*, storage conditions 735.

Anaerobic microorganisms,

- filters, wastewater treatment, coal 5843.

Ananas comosus,

- infection, *Penicillium funiculosum*, *Fusarium moniliforme* var. subglutinans, factors affecting pathogenesis 8834.

Ancevinin,

- isolation, actinomycetes, amino acid sequence 2290.

Ancylolobacter,

- biodegradation, glucosylsaccharinic acid 2717.

Androst-4-ene dione,

- conversion, methyl-perhydroindanone biosynthesis, immobilized cells, *Nocardia* 105.

Androstane dione,

- synthesis, 3 α -hydroxysteroid dehydrogenase, immobilized enzymes, *Aspergillus* 106.

Anemone flaccida,

- rust, *Puccinia japonica*, life cycle 8011.

Anesthesia,

- Apis mellifera*, burning, *Langermannia wahlbergi* 4230.

Anghenthus,

- ectomycorrhizal symbiosis, Australia 2132.

Angiotensin-converting enzyme,

- Nocardia orientalis*, muracins, inhibition, biological properties, biosynthesis 5959.

Angolamycin,

- deoxidation, products antibacterial activity 5789.

Anguilla tritici,

- incidence, *Corynebacterium michiganense* subsp. tritici, association, spike, *Triticum aestivum* 8803.

Anhydrotetracycline oxygenase,

- autozymic production, growth rate, sugar, carbon sources effects on, *Streptomyces aureofaciens* 4860.

Angiozanthos,

- Alternaria alternata* infection, Australia 2020.

Aniline,

- biodegradation, *Frateria* 6162.
- biodegradation, metabolic pathways, aquatic microorganisms 8688.
- biodegradation, microorganisms, characterization 1033.
- biodegradation, nitrification inhibition, activated sludge 4093.
- biodegradation, *Rhodococcus erythropolis* 2708.

Aniline blue,

- media (culture), *Legionella* identification 715.

- animal models,**
dental caries, prophylaxis, endo-1,3- α -D-glucanase 4140.
endocarditis, *Streptococcus faecalis*, antibacterial activity, gentamicin, \pm mezlocillin, \pm ampicillin 4838.
immunogenicity, synthetic hepatitis B surface antigen + fatty acids conjugate, use vaccines 4071.
meningitis, *Escherichia coli*, *Listeria monocytogenes*, antibacterial activity, mezlocillin 4884.
mice, antiseptics disinfection, skin microflora 4141.
rats, candidiasis, mannose levels, gas-liquid chromatography 2536.
rats, dental caries prophylaxis, fluoride release equipment, oral cavity 6725.
rotavirus (bovine) vaccines, immunogenicity 3177.
tuberculosis, spirioperydylrifamycin treatment, antibacterial activity 2282.
- animal wastes,**
cattle, + *Cocos nucifera* agricultural wastes, methane production 1487.
cattle, digestion (anaerobic), methanogenesis 7504.
cattle, digestion (anaerobic), wastewater treatment, mesophilic bacteria 7519.
+ cellulose, digestion (anaerobic), cattle 7513.
chickens, digestion (anaerobic), reactors, methanogenesis, mathematical models 8394.
composting, aerobic conditions, Korea, Rep. 4101.
composting, *Scopulariopsis brevicaulis*, cellulase, production 928.
conversion, electricity, methanogenesis, ethanol production, digestion (anaerobic) 5275.
digestion (aerobic), oxygenation 4108.
digestion (anaerobic), cattle 7505.
digestion (anaerobic), methanogenesis, mesophilic bacteria 7517.
digestion (anaerobic), methanogenesis, pigs 7514.
digestion (anaerobic), pigs 6702.
digestion (anaerobic), wastewater treatment, pigs 7521.
effluents, wastewater treatment, bacteria 7512.
fermentation, bacteria methane production, kinetics, mathematical models 9033.
fermentation, silage, nutritive value, feeds, pigs 7019.
methanogenesis, digestion (anaerobic), reactors design, methane use 5699.
methanogenesis, immobilized cells, methanogenic bacteria 4124.
microorganisms, digestion (anaerobic), oxygen, effects on, methanogenesis 8407.
mixed culture inoculum, lactic acid production 10.
pigs, cellulose, substrates, digestion (anaerobic) 2333.
pigs, digestion (aerobic), storage, anaerobic conditions, digestion (anaerobic) 7507.
pigs, wastewater treatment, aerobic conditions 2377.
pigs, wastewater treatment, aerobic conditions, odors 2378.
pigs, wastewater treatment, anaerobic conditions, methanogenesis 9037.
treatment, *Candida ingens* fermentation, proteins production 158.
waste treatment, methanogenesis 2339.
- animals,**
feeds, aflatoxins detection, Zaire 7057.
feeds, detection aflatoxins, India 7051.
feeds, detection, mycotoxins, methodology, use, high-performance liquid chromatography, thin-layer chromatography 7053.
feeds, isolation *Aspergillus*, aflatoxins biosynthesis in vitro, Egypt 7062.
feeds, mycotoxins association ingestion, Yugoslavia 7048.
feeds, mycotoxins food contamination, screening methodology, British Isles 7047.
feeds, rubratoxin B Penicillium, use, thin-layer chromatography, methodology, factors affecting 7054.
ingestion, zearalenone, toxicity, production, *Fusarium* scab, Gramineae, reviews 7056.
macrophages, *Mycobacterium leprae* cell culture 7585.
mycotoxicosis, association, mycotoxins food contamination, books, conferences 7647.
mycotoxins food contamination, screening methodology, reviews 7079.
mycotoxins tissues levels, metabolism, reviews 7075.
- insects,**
acid rain, effects on soil microorganisms heterotrophy 2939.
heavy metal, susceptibility, *Mycobacterium scrofulaceum*, *Mycobacterium intracellulare*, *Mycobacterium avium* 3043.
- invertebrates,**
seeds, rice tungro virus, pest control, *Nephotettix virescens*, vectors, rice tungro virus, *Oryza sativa* 6299.
- invertebrates,**
biological control, microbiology, pathology, genetics, *Bacillus sphaericus* 6898.
larvae, infection, ultrastructure, histopathology, biological control, *Culicimorytes clavisporus* 2653.
invertebrates franciscanus,
biological control, larvicides, *Bacillus sphaericus* spores, fate, ponds 1845.
invertebrates rufi,
larvae, biological control, mortality, dose-response effects, *Culicimorytes clavisporus* 2664.
invertebrates stephensi,
larvae, toxicity, α -endotoxin, spore crystals, *Bacillus sphaericus* 3572.
pathogenicity, *Entomophthora culicis* 138.
invertebrates sundialis,
biological control, endotoxins, *Bacillus thuringiensis* 134.
- invertebrates,**
Christoneura fumiferana, endotoxins induction, biological control, *Bacillus thuringiensis* 3570.
invertebrates,
antibacterial activity, *Mycobacterium leprae* 9086.
antibacterial activity relationship, *Staphylococcus aureus* killing, leukocytes phagocytosis 2298.
- invertebrates,**
Aureobasidium pullulans, *Alternaria solani*, use biological control, *Lycopersicon esculentum* 2080.
Azotobacter chroococcum, biological control, *Rhizoctonia solani* infection, *Solanum tuberosum* 2088.
Bacillus subtilis antibiotics production, *Phoma betae*, oxafun inhibition, rhizosphere 2139.
bacteria, milk isolation, *Staphylococcus aureus* growth, Enterotoxins biosynthesis 8707.
Cladosporium, leaf rust, *Melampsora larici-populina*, hybrids, *Populus* 361.
Erwinia, Phytophthora cactum, herbicides effects on 2177.
lactic acid bacteria, *Staphylococcus aureus* disinfection, hospitals 3227.
Massena aquatica infection wood, fungi 2110.
Pseudomonas siderophores, pathogens, seed treatments, *Solanum tuberosum* 2831.
- Antagonism, (continued)**
Pseudomonas siderophores, phytopathogenic fungi, *Erwinia*, rhizosphere, *Solanum tuberosum* 2830.
Rhizobium growth, saprophytes, fungi 7248.
rhizosphere actinomycetes, *Laccaria laccata*, *Pythium*, *Phytophthora*, *Eucalyptus marginata*, *Pinus radiata* 2099.
soil microorganisms, *Rhizoctonia*, *Ceratobasidium*, eye spot, Gramineae 7208.
Streptomyces, fungi, *Azospirillum lipoferum*, *Azospirillum brasilense*, role inoculum survival, soil 4658.
- Antagonists,**
bacteria, effects on pathogenesis, *Phytophthora cactorum* crown rot, *Malus* 5511.
- Antamanide,**
analogs, radioactive labelling, peptide synthesis, *Amanita phalloides* 7664.
- Antarctica,**
nematophagous fungi, parasites, Nematoda, soil 8982.
- Anthelmintic agents,**
avermectins production, *Streptomyces avermitilis* 120.
- Antheraea eucalypti,**
cell lines, growth, African swine fever virus 1545.
- Anthers,**
free radicals levels, *Ustilago maydis* smut effects on, Zea mays 5433.
localization, virus-like particles, cherry leaf roll virus, transmission (vertical), *Prunus avium*, *Betula pendula*, *Juglans regia* 7990.
- Anthrace,**
biodegradation, reviews 8278.
oxidation, stereoselectivity, *Cunninghamella elegans* 2188.
- Anthrax,**
Cercospora coffeicola, shading, rainfall, seasonal variations, plantations, *Coffea arabica* 273.
Colletotrichum dematium, disease resistance, *Lycopersicon esculentum*, inheritance 2851.
Colletotrichum gloeosporioides, pathology, *Stylosanthes capitata* 7932.
Colletotrichum gloeosporioides var. minor, epidemiology, *Mangifera indica* 7159.
Colletotrichum graminicola, *Poa annua* var. reptans, epidemiology, weather 5429.
Colletotrichum lagenarium, disease resistance, plant breeding, cultivars, *Citrus latifolius* 8905.
Colletotrichum lagenarium, epidemiology, *Lagenaria siceraria*, India 8830.
Colletotrichum lindemuthianum, *Phaseolus vulgaris*, pathogenicity 1122.
Colletotrichum sublineale, *Zizania aquatica* 1135.
Colletotrichum trifolii, *Colletotrichum fragariae*, susceptibility, *Lupinus angustifolius* 2784.
Colletotrichum trifolii, disease resistance, *Medicago sativa* 5499.
fruit rot, *Glomerella cingulata*, USA, Florida, *Fragaria* 8047.
Gnomonia leptoystia, disease resistance, relationship, 5-hydroxy-1,4-naphthoquinone, hydrolytic glucoside, *Juglans nigra* 3855.
Gnomonia leptoystia, epidemics, incidence, *Juglans nigra* plantations, USA, Illinois 7995.
Gnomonia leptoystia, *Juglans nigra*, growth association 3918.
Shcheloma ampelimum, *Vitis vinifera* yield 2029.
- Anthracycline antibiotics,**
biosynthesis, inducers intracellular levels, *Streptomyces griseus* 6068.
- Anthramycin,**
biosynthesis pathway, models, reviews, *Streptomyces retineus* 4375.
- Anthranilic acid,**
biodegradation, anaerobic conditions, denitrifying bacteria 6172.
biodegradation, *Micrococcus* 3664.
- Anthropology,**
fungi, biodegradation, wood carvings 1023.
- Anthyllus vulneraria,**
plant extracts, antiviral activity, herpesvirus, poliovirus 2 8325.
- Antibacterial agents,**
activity, effects on, cell membranes, ribosomes, nucleic acids, amino groups, bacteria 9094.
antibacterial activity, *Haemophilus pleuropneumoniae* 6461.
antibacterial activity, norfloxacin comparison, urinary tract isolates 6453.
Erythrina stigmoides flavanones, isolation, new records 1328.
inhibition, respiration, *Klebsiella* 4751.
ofloxacin, nalidixic acid analogs, antibacterial activity 4735.
sensitivity, gram-negative bacteria 7359.
sensitivity, R-factor R124 effects on membrane permeability, membrane proteins, outer membranes, *Escherichia coli* 4724.
- Antibiotic A-1686,**
Actinoplanes, biological properties, antibacterial activity, *Staphylococcus*, *Streptococcus* 6571.
isolation, Actinoplanes, characterization 6568.
- Antibiotic AC549,**
production, fungi, morphology association 2255.
- Antibiotic AL-87,**
resistance association, fatty acid composition, *Staphylococcus aureus* 7313.
- Antibiotic AN-1,**
production, isolation, characterization, *Streptomyces albus* 4059.
- Antibiotic AN-201,**
production, isolation, structure, antibacterial activity, *Streptomyces noiensis* 3134.
- Antibiotic AN-3,**
biosynthesis, isolation, physicochemical properties, antibacterial activity, antitumor activity, *Streptomyces albus* 1439.
- Antibiotic AN-7,**
production, isolation, characterization, *Streptomyces griseocarnatus* 4061.
- Antibiotic antagonism,**
cefotaxime antibacterial activity, reviews 507.
chloramphenicol, β -lactam antibiotics, antibacterial activity, *Klebsiella pneumoniae* 4806.
 β -lactam antibiotics, aminoglycoside antibiotics, bactericidal activity, *Pseudomonas aeruginosa* 7403.
mezlocillin, antibacterial activity, bactericidal activity 7412.
piperacillin, piperacillin, antibacterial activity, *Pseudomonas aeruginosa* 7442.
- Antibiotic A2315A,**
biosynthesis, N.M.R. 532.
biosynthesis, actinomycetes 9210.

- Antibiotic B-371**, structure-activity relationships, antibacterial activity, *Escherichia coli*, *Bacillus subtilis*, antifungal activity, *Mucor miehei* 8338.
- Antibiotic C-19393**, synthesis, antibacterial activity, structure-activity relationships 517.
- Antibiotic CD-920**, isolation, structure, characterization, *Streptomyces pulvereus* subsp. *foetresus* 2639.
- Antibiotic CI-920**, production, *Streptomyces pulvereus* subsp. *foetresus* 2638.
- Antibiotic DE-6783**, cross-resistance, *Pseudomonas aeruginosa*, *Escherichia coli* 6421.
- Antibiotic DL 8280**, antibiotic resistance, *Mycobacterium tuberculosis* 7344.
- Antibiotic DL8280**, antibacterial activity, *Mycobacterium tuberculosis* 9084.
- Antibiotic FCE 22101**, antibacterial activity 1431.
- Antibiotic FK 027**, antibacterial activity, comparison, cefaclor, cephalixin, amoxicillin, bacteria 2316.
- Antibiotic FR 17027**, antibacterial activity, β -lactamase stability 7430.
- Antibiotic FR-900109**, derivatives, X-ray crystallography 1434.
- Antibiotic FR-900109**, *Streptomyces prunicolor* biosynthesis, antibacterial activity, gram-negative bacteria 1435.
- Antibiotic FR-900318**, biosynthesis, *Aspergillus candidus*, characterization 3103.
- Antibiotic FR-900336**, isolation, *Streptomyces soyaensis* subsp. *tanegashimaensis*, characterization 6566.
- Antibiotic HR 810**, antibacterial activity, β -lactamase, stability, characterization 3100.
- Antibiotic activity**, gram-negative bacteria clinical isolates 7429.
- antibiotic sensitivity testing, Enterobacteriaceae, *Pseudomonas aeruginosa* 6511.
- Antibiotic K-4619**, antibacterial activity, gram-negative bacteria, gram-positive bacteria 7479.
- Antibiotic M-2305**, antibacterial activity 4062.
- Antibiotic M-2305**, production, isolation, characterization, *Mycococcus xanthus* 4062.
- Antibiotic MDL 19,592**, antibacterial activity, *Staphylococcus aureus*, *Streptococcus*, *Haemophilus influenzae* 1389.
- Antibiotic MM 14201**, production, purification, structure, antibacterial activity, *Streptomyces* 3135.
- Antibiotic MM 19290**, high-performance liquid chromatography 1425.
- Antibiotic MM13902**, β -lactamase inhibitors, gram-negative bacteria 9161.
- Antibiotic MM4550**, β -lactamase inhibitors, gram-negative bacteria 9161.
- Antibiotic OA-6129D**, structure, spectroscopy, *Streptomyces* 7460.
- Antibiotic OA-6129E**, structure, spectroscopy, *Streptomyces* 7460.
- Antibiotic OK-173**, production, antibacterial activity, *Streptomyces*, taxonomy 2289.
- Antibiotic PD 113,270**, isolation, structure, characterization, *Streptomyces pulvereus* subsp. *foetresus* 2639.
- Antibiotic PD 113,271**, production, *Streptomyces pulvereus* subsp. *foetresus* 2638.
- Antibiotic PD 113,271**, isolation, structure, characterization, *Streptomyces pulvereus* subsp. *foetresus* 2639.
- Antibiotic PD 113,271**, production, *Streptomyces pulvereus* subsp. *foetresus* 2638.
- Antibiotic PS-5**, synthesis 9212.
- Antibiotic P168**, structure, *Pseudomonas liliacinus* 9207.
- Antibiotic resistance**, aminoglycoside antibiotics, actinomycetes 3022.
- Antibiotic resistance**, aminoglycoside antibiotics, bacteria, reviews 9051.
- Antibiotic resistance**, aminoglycoside antibiotics, biosynthesis relationship, actinomycetes 3016.
- Antibiotic resistance**, aminoglycoside antibiotics, clinical isolates, Enterobacteriaceae, *Pseudomonas aeruginosa*, Turkey, USA 2195.
- Antibiotic resistance**, aminoglycoside antibiotics, correlation, aminoglycoside acetyltransferase, plasmids, *Mycobacterium fortuitum* 7342.
- Antibiotic resistance**, aminoglycoside antibiotics, relationship, aminoglycoside 2'-nucleotidyltransferase activity, *Escherichia coli* 3028.
- Antibiotic resistance**, aminoglycoside antibiotics, *Streptococcus faecalis* 7330.
- Antibiotic resistance**, amoxicillin, cephradine, intestinal microflora, *Escherichia coli*, man 6419.
- Antibiotic resistance**, ampicillin, chloramphenicol, *Haemophilus influenzae*, clinical isolates, antibiotic sensitivity testing, incidence, Spain 6420.
- Antibiotic resistance**, ampicillin, clinical isolates, *Haemophilus influenzae* 9077.
- Antibiotic resistance**, ampicillin, epidemiology, meningitis, *Haemophilus influenzae*, man 7314.
- Antibiotic resistance**, ampicillin, *Haemophilus influenzae*, clinical isolates, disseminated infection, children 4411.
- Antibiotic resistance**, ampicillin, penicillin-binding protein, membrane permeability, *Haemophilus influenzae* 7338.
- Antibiotic resistance**, ampicillin, tetracycline, gentamicin, clinical isolates, *Escherichia coli* 4004.
- Antibiotic resistance**, ampicillin, *Vibrio* 8229.
- Antibiotic resistance**, antibiotic DL 8280, *Mycobacterium tuberculosis* 7344.
- Antibiotic resistance**, antibiotic sensitivity testing, *Bacteroides fragilis*, clinical isolates, surveys 7348.
- Antibiotic resistance**, antibiotic sensitivity testing, plasmids transfer, reviews, anaerobic bacteria 7335.
- Antibiotic resistance**, azlocillin, clinical isolates, bacteria 5715.
- Antibiotic resistance**, bacteria 9067.
- Antibiotic resistance**, bacteria, antibacterial activity, rifamycin 7340.
- Antibiotic resistance**, bacteria, antibiotics, feeds additives, livestock, reviews 9062.
- Antibiotic resistance**, bacteria, books 9337.
- Antibiotic resistance**, bacteria, clinical isolates, surveys 9047.
- Antibiotic resistance**, bacteria, metals tolerance, drinking water isolates 6433.
- Antibiotic resistance**, (continued)
- Antibiotic resistance**, bacteria microflora, neonates, man 7332.
- Antibiotic resistance**, bacteria, relationship, antibiotics use, hospitals 3030.
- Antibiotic resistance**, bacteria, screening 7315.
- Antibiotic resistance**, bacteria, selection, antibiotics treatment, man 6404.
- Antibiotic resistance**, bactericidin, *Staphylococcus*, mechanisms, development 7329.
- Antibiotic resistance**, *Bacteroides fragilis*, cefoxitin 1309.
- Antibiotic resistance**, *Bordetella pertussis* 4710.
- Antibiotic resistance**, cefamandole, disc-diffusion test, gram-negative bacilli 8292.
- Antibiotic resistance**, cefotaxime, amikacin, cross-resistance, clinical isolates, *Serratia marcescens* 4687.
- Antibiotic resistance**, cephalosporins, β -lactamase, *Proteus vulgaris* 2194.
- Antibiotic resistance**, cephalosporins, bacteria 7333.
- Antibiotic resistance**, cephalosporins, clavulanic acid inhibition β -lactamase, *Bacteroides fragilis* 3019.
- Antibiotic resistance**, cerulenin, fatty acid synthetase, purification, characterization, *Cephalosporium caeruleum*, comparison, *Saccharomyces cerevisiae* 8528.
- Antibiotic resistance**, cervical microflora, buffaloes 2205.
- Antibiotic resistance**, chloramphenicol, association, chloramphenicol acetyltransferase, *Escherichia coli* 3997.
- Antibiotic resistance**, chloramphenicol, bacteria, long-term effects 7323.
- Antibiotic resistance**, chloramphenicol, bacteria, reviews 9052.
- Antibiotic resistance**, chloramphenicol, clinical isolates, *Salmonella typhi* 9080.
- Antibiotic resistance**, chlortetracycline, aerobic bacteria, coliforms, animal isolates, relationship feeds additives, pigs 8295.
- Antibiotic resistance**, chlortetracycline, anaerobic bacteria, animal isolates, chlortetracycline containing feeds, pigs 2197.
- Antibiotic resistance**, chlortetracycline, fecal coliforms, Bolation, pigs 5711.
- Antibiotic resistance**, clindamycin, *Bacteroides*, detection 3014.
- Antibiotic resistance**, clindamycin, *Bacteroides fragilis*, clinical isolates 7318.
- Antibiotic resistance**, clinical isolates, bacteria, nosocomial environments 3994.
- Antibiotic resistance**, clinical isolates, gram-positive cocci, gram-negative bacilli, anaerobic bacteria, eye infection 5757.
- Antibiotic resistance**, clinical isolates, *Staphylococcus aureus*, West Indies 5707.
- Antibiotic resistance**, coliforms, isolation, pigs, association, chlortetracycline, treatment 3033.
- Antibiotic resistance**, coliforms, survival, lagoons, wastewater treatment 1482.
- Antibiotic resistance**, colistin, role plasma membranes, protoplasts, liposomes, *Bacillus colistinus* 9074.
- Antibiotic resistance**, conferences 847.
- Antibiotic resistance**, cross-resistance, cephalosporins, penicillins, Enterobacter, *Klebsiella*, *Pseudomonas aeruginosa* 7352.
- Antibiotic resistance**, (D,L)-7-(α -fluorocetylaminocyclohexanecarboxylic acid, β -lactamase, hydrolysis, antibacterial activity, *Escherichia coli*, Enterobacter cloacae 9190.
- Antibiotic resistance**, Enterobacteriaceae, Inc plasmids, antibiotics, effects on 6423.
- Antibiotic resistance**, Enterobacteriaceae, rivers, ponds, Bangladesh 4133.
- Antibiotic resistance**, epidemiology markers, *Staphylococcus aureus* 6782.
- Antibiotic resistance**, ermC gene, ermD gene, gene regulation, role protein biosynthesis, ribosomes, *Staphylococcus aureus*, *Bacillus licheniformis* 6427.
- Antibiotic resistance**, Erysipelothrix rhusiopathiae, isolation, pigs, characterization 4695.
- Antibiotic resistance**, erythromycin, *Campylobacter fetus* subsp. *jejuni* 446.
- Antibiotic resistance**, erythromycin, *Staphylococcus aureus*, reviews 9059.
- Antibiotic resistance**, erythromycin, tetracycline, genetic markers conjugation, plasmids deficiency, *Streptococcus pyogenes* 6426.
- Antibiotic resistance**, *Escherichia coli* 6409.
- Antibiotic resistance**, *Escherichia coli* clinical isolates, correlation R factors 1313.
- Antibiotic resistance**, *Escherichia coli*, correlation, kanamycin 6'-acetyltransferase activity, aminoglycoside antibiotics chemical modification 5714.
- Antibiotic resistance**, *Escherichia coli*, feces isolates, sheep 7321.
- Antibiotic resistance**, *Escherichia coli*, hemolysis, isolation, mice 7316.
- Antibiotic resistance**, *Escherichia coli*, R factors, dogs isolates 3010.
- Antibiotic resistance**, *Escherichia coli*, R factors, incidence, relationship antibiotics treatment, diarrhea, man 3034.
- Antibiotic resistance**, *Escherichia coli*, toxigenicity relationship 6424.
- Antibiotic resistance**, evolution, selection, bacteria, reviews 9056.
- Antibiotic resistance**, R factor, role, *Shigella* 6438.
- Antibiotic resistance**, R factors characterization, clinical isolates, *Staphylococcus aureus* 9178.
- Antibiotic resistance**, R factors, electrophoresis, epidemiology, clinical isolates, *Salmonella typhi* 4001.
- Antibiotic resistance**, R factors, Enterobacteriaceae 4002.
- Antibiotic resistance**, R factors, *Escherichia coli* animal isolates, relationship antibiotics, feeds 4003.
- Antibiotic resistance**, R factors, *Klebsiella*, *Escherichia coli*, clinical isolates 5709.
- Antibiotic resistance**, R factors, *Pseudomonas aeruginosa*, transfer, *Escherichia coli*, clinical isolates, neonates, man 9043.
- Antibiotic resistance**, R factors, transfer, *Salmonella*, water isolates, waste water, surface water 9046.
- Antibiotic resistance**, R factors transfer, *Staphylococcus aureus* 9044.
- Antibiotic resistance**, genes, *Streptococcus sanguis*, transformation, DNA, plasmids, *Streptococcus lactis* 6990.
- Antibiotic resistance**, gentamicin, Enterobacteriaceae, isolation, waste water, plasmid transmission 9076.
- Antibiotic resistance**, gentamicin, lipopolysaccharides structure, *Pseudomonas aeruginosa* 7350.
- Antibiotic resistance**, gentamicin, plasmids mediation, *Staphylococcus aureus* 7327.
- Antibiotic resistance**, gentamicin, plasmids, transposition, *Staphylococcus aureus* 9066.
- Antibiotic resistance**, gentamicin uptake, *Staphylococcus aureus* 9075.
- Antibiotic resistance**, hygromycin B, aminocycloitol phosphotransferase, gene mapping, plasmids, *Escherichia coli* 427.
- Antibiotic resistance**, Inc plasmids, R factors, *Shigella sonnei* 4691.
- Antibiotic resistance**, *Klebsiella*, epidemiology, serotyping 445.
- Antibiotic resistance**, *Klebsiella pneumoniae*, plasmids, conjugation, *Serratia marcescens* 4716.
- Antibiotic resistance**, β -lactam antibiotics, β -lactamase, bacteria, reviews 9050.
- Antibiotic resistance**, β -lactam antibiotics, β -lactamase, gram-negative bacteria, reviews 3036.
- Antibiotic resistance**, β -lactam antibiotics, β -lactamase, *Pseudomonas aeruginosa* 9082.
- Antibiotic resistance**, β -lactam antibiotics, bacteria, β -lactamase role, reviews 438.
- Antibiotic resistance**, β -lactam antibiotics, *Haemophilus influenzae* type b, clinical isolates, characterization 6407.
- Antibiotic resistance**, β -lactam antibiotics, lipopolysaccharides structure, membrane permeability, *Pseudomonas aeruginosa* 7349.
- Antibiotic resistance**, β -lactam antibiotics, membrane permeability, *Pseudomonas aeruginosa* 9081.
- Antibiotic resistance**, β -lactam antibiotics, penicillin-binding protein characterization, clinical isolates, *Streptococcus viridans* 428.
- Antibiotic resistance**, β -lactamase, cefotiam, antibacterial activity, Enterobacter, *Klebsiella* 4711.
- Antibiotic resistance**, lactic acid bacteria, *Streptococcus*, phosphate, buffers, media (culture), effects on 5708.
- Antibiotic resistance**, macrolide antibiotics, *Mycoplasma*, animal isolates, chickens 3087.
- Antibiotic resistance**, macrolide antibiotics, plasmids, *Streptococcus*, host range 3025.
- Antibiotic resistance**, macrolide antibiotics, *Streptococcus pyogenes*, clinical isolates, serotypes 3018.

Antibiotic resistance, (continued)

maritima animal isolates, Streptococcus agalactiae, *Staphylococcus aureus*, Streptococcus 9083.
 mechanisms, antibiotics, structure-activity relationships, reviews 9063.
 mechanisms, antibiotics uptake, bacteria, reviews 9049.
 mechanisms, mutation, bacteria, reviews 9048.
 methicillin, *Staphylococcus aureus*, disc-diffusion test, detection 7346.
 methicillin, *Staphylococcus aureus*, in vitro, β -lactam antibiotics
 antibacterial activity 7343.
 methodology, *Staphylococcus aureus* detection methicillin 6765.
 metronidazole, *Bacteroides fragilis* clinical isolates 8291.
 mezlocillin, β -lactamase, role, *Staphylococcus aureus* 3008.
 micrococci, mutants, ribosomal protein L11 structure, *Bacillus megaterium* 6432.
 riminocyclins, dilution tests, *Streptococcus*, use sodium chloride containing
 Mueller-Hinton agar 3012.
 moxalactam, β -lactamase, membrane permeability, penicillin-binding protein,
 Serratia marcescens 3038.
 nisin, Streptococcus lactis subsp. diacetylactis, plasmid pNP40, dairy starters
 2196.
 novobiocin, *Staphylococcus epidermidis*, MS-2 system 434.
 nystatin, inhibition, active transport, *Candida tropicalis* 5716.
 Pasteurella haemolytica, characterization 3011.
 penicillin, β -lactamase production, oral cavity clinical isolates 7334.
 penicillin acylase, α -aminobenzylpenicillin derivatives, hydrolysis,
 Escherichia coli, *Bacillus megaterium* 7331.
 penicillin, antibacterial activity, cefuroxime, cefotaxime, *Staphylococcus*
aureus, *Staphylococcus epidermidis* 4826.
 penicillin, association, β -lactamase, clinical isolates, Streptococcus
 faecalis 7326.
 penicillin, chloramphenicol, Streptococcus pneumoniae, clinical isolates, USA,
 Colorado 436.
 penicillin G, clinical isolates, *Staphylococcus aureus* 2199.
 penicillin, methicillin, *Staphylococcus aureus*, Streptococcus pneumoniae, quality
 control, clinical microbiology, antibiotic sensitivity testing 4688.
 penicillin, selection, *Staphylococcus aureus*, mice animal isolates 443.
 physicochemical properties, plasmid pKMR, Escherichia coli, Shigella sonnei 4694.
 piperacillin, ceftazidime, cefsulodim, association, β -lactamase, Pseudomonas
 aeruginosa 4696.
 plasmid pKMR, Escherichia coli 4699.
 plasmid pKM101, Escherichia coli, Salmonella typhimurium, amprolimum, effects
 7324.
 plasmids, β -lactamase, Enterobacteriaceae 8290.
 plasmids, Lactobacillus helveticus, Lactobacillus bulgaricus 2202.
 Proteus 6440.
 Proteus, clinical isolates 7328.
 Pseudomonas aeruginosa, amoxicillin+clavulanic acid, augmentin 7438.
 Pseudomonas aeruginosa, colonial characteristics 526.
 Pseudomonas aeruginosa, Escherichia coli, cross-resistance 6421.
 Pseudomonas aeruginosa, surveys, British Isles 9059.
 Pseudomonas, isolation, antibiotics production industrial wastes, R factors
 characterization 2208.
 relationship β -lactamase levels, clinical isolates, *Staphylococcus aureus*
 2203.
 relationship antibiotics biosynthesis, bacteria, reviews 9057.
 relationship urease, phosphatase, production, clinical isolates, gram-negative
 bacilli 4709.
 resistance, *Staphylococcus aureus*, antibiotic sensitivity testing, erythromycin,
 clindamycin, gentamicin, tetracycline 7424.
 Rhizobium leguminosarum, morphology, Vigna unguiculata 9013.
 Rhizobium, nodulation efficiency correlation, vigna radiata 4682.
 ribostamycin, kanamycin, novobiocin, destomycin, racemomycin, genes, cloning,
 Streptomyces 1314.
 role β -lactamase, bacteria, infection, clinical aspects, reviews, man 3031.
 role, alginate acid, binding, antibiotics, Pseudomonas aeruginosa 6411.
 role, enzymes, *Staphylococcus aureus*, *Staphylococcus epidermidis*, clinical
 isolates, purification, characterization 5165.
 Salmonella, animal isolates, meat isolates 6441.
 Salmonella clinical isolates, epidemiology 3992.
 Salmonella, R factor incidence 6430.
 Salmonella, survival, beef, refrigeration 7005.
 Salmonella typhi, isolation, typhoid fever, biochemical characteristics 3024.
 Salmonella typhi plasmids, mediation, chloramphenicol, trimethoprim, ampicillin
 7322.
 Salmonella typhimurium, gentamicin, cattle 3998.
 Serratia marcescens, carbenicillin 447.
 Serratia marcescens, plasmids analysis 4000.
 sewage isolates, chlorination effects on 6437.
 Shigella dysenteriae, clinical isolates 4715.
 spectinomycin, Neisseria gonorrhoeae, characterization 2209.
 Streptococcus aureus, clinical isolates, relationship protein A biosynthesis
 9054.
 Streptococcus aureus, imipenem, methicillin 4708.
 Streptococcus aureus, Streptococcus, reviews 9060.
 Streptococcus, bile, bile acids, effects on 6439.
 Streptococcus, cattle isolates 3041.
 Streptococcus, gram-negative bacilli, clinical isolates 6405.
 Streptococcus, oxacillin, methicillin, detection, use, AutoMicrobic test 2207.
 Streptococcus, synthetic penicillins, methodology 3015.
 Streptococcus, antibiotic synergism, penicillin, streptomycin 444.
 streptomycin, association, uptake, Rhizobium 5713.
 streptomycin, kanamycin, gene expression, Escherichia coli, Rhizobium meliloti,
 transposon Tn5, hybridization analysis 442.
 streptomycin, mutants selection, dairy starters, Streptococcus 2730.
 streptomycin production, Streptomyces griseus 1310.
 streptomycin, Streptococcus faecalis, clinical isolates, association, ribosomes
 4697.
 streptomycin, transposon Tn5, mediation, Escherichia coli, Rhizobium meliloti
 7336.
 structure-activity relationships 1376.
 tetracycline, association, transposon 10, Haemophilus parainfluenzae, homology,
 Escherichia coli 9073.
 tetracycline, chloramphenicol, rifampicin, amoxicillin, Escherichia coli,
 isolation, chickens 3032.
 tetracycline, conjugation, gene transfer, transposons, Streptococcus 6431.
 tetracycline, fecal coliforms, pigs, characterization 1317.
 tetracycline, gene transfer, Clostridium perfringens, characterization 3013.

Antibiotic resistance, (continued)

tetracycline, plasmid RP4, continuous culture, Escherichia coli 7351.
 tetracycline, plasmids, DNA, restriction endonuclease mapping, Haemophilus
 ducreyi 3027.
 tetracycline, R factors, Escherichia coli 2206.
 tetracycline, relationship bacteriocinogeny, Clostridium perfringens 4707.
 tetracycline, transposon Tn10, repressors, binding sites, genetic control,
 Escherichia coli 1315.
 thyrothricin, gramicidin 7477.
 Vibrio cholerae 6442.
 Vibrio cholerae, plasmids, gene transfer, clinical isolates, man, India, Tamil
 Nadu 6400.
Antibiotic Ro 09-0766,
 Streptomyces dimorphogenes, structure 5794.
Antibiotic Ro 09-0767,
 Streptomyces dimorphogenes, structure 5794.
Antibiotic Ro 09-0768,
 Streptomyces dimorphogenes, structure 5794.
Antibiotic RU 28965,
 antibacterial activity 4878.
Antibiotic Sch 25393,
 antibacterial activity 6542.
Antibiotic sensitivity testing,
 Achromobacter xylosoxidans nosocomial infection isolates, fatty acid composition
 4789.
 aerobic bacteria, dissolved oxygen levels, electrochemistry, diagnosis,
 bacteriuria 8345.
 agar diffusion test, measuring techniques, calipers 743.
 agar dilution test, clinical microbiology 7389.
 agar diffusion test, filamentous microorganisms, fungi 5763.
 amikacin, antibiotic synergism, aztreonam, piperacillin, ticarcillin, Pseudomonas
 aeruginosa, Pseudomonas cepacia, clinical isolates, cystic fibrosis, children
 3170.
 aminoglycoside antibiotics, gram-negative bacteria, isolation, heart, surgery
 3107.
 amoxicillin+clavulanic acid, urinary tract, infection, bacteria, clinical
 isolates 6525.
 amphotericin B, fungi, radiometry 2280.
 ampicillin, amoxycillin, Enterobacter cloacae, Citrobacter freundii, Serratia
 marcescens 2198.
 ampicillin, carbenicillin, mezlocillin, azlocillin, piperacillin, clavulanic acid
 effects on, Bacteroides fragilis 9164.
 anaerobic bacteria, clinical isolates, cefoxitin, metronidazole, clindamycin
 6549.
 anaerobic bacteria, methodology, comparison 7408.
 animal isolates, Aeromonas hydrophila 8350.
 antibiotic HR810, Enterobacteriaceae, Pseudomonas aeruginosa 6511.
 antibiotic resistance, Bacteroides fragilis, clinical isolates, surveys 7348.
 antibiotic resistance, plasmids transfer, reviews, Bacteroides 7335.
 antibiotic sensitivity testing, Pseudomonas aeruginosa 503.
 antibiotic SK&F 88070, Pseudomonas aeruginosa, Enterobacteriaceae 6510.
 Autobac test, bacteria, blood culture 494.
 automated methods 2251.
 automated methods 7404.
 automated methods, characterization 481.
 automated methods, gram-negative bacilli 486.
 AutoMicrobic test, gentamicin, tobramycin, amikacin, Pseudomonas aeruginosa 5778.
 AutoMicrobic test, gram-negative bacteria, clinical isolates, methodology,
 comparison 7419.
 bacteria 2249.
 bacteria, animal isolates 7420.
 bacteria, automated methods 3258.
 bacteria, clinical isolates, Ethiopia, hospitals, blood culture 7400.
 bacteria, clinical isolates, ticarcillin+clavulanic acid, disc-diffusion test
 5774.
 bacteria, clinical isolates, treatment, endometritis, cattle 4813.
 bacteria, clinical, respiratory tract 3088.
 bacteria, petri dishes, factors affecting disc-diffusion test 2245.
 bacteria, photometry, computer applications 3076.
 bacteria, urinary tract infection isolates, dogs 4787.
 bacteria, urinary tract microflora isolates 6501.
 bactericidal activity, rifampicin, vancomycin, antibiotic synergism,
 Streptococcus aureus 7413.
 Bacteroides fragilis, β -lactamase activity 7407.
 Bacteroides nodosus 3056.
 Branhamella catarrhalis 9163.
 Branhamella catarrhalis, in vitro 9087.
 burn infection bacteria 3084.
 Campylobacter jejuni, animal isolates, laboratory animals, dogs 9180.
 Campylobacter jejuni, Campylobacter coli 5755.
 Campylobacter jejuni comparison, Campylobacter coli 9167.
 cations levels effects on 6498.
 cefoperazone, bacteria 502.
 cephalosporins 1385.
 cephalosporins, disc-diffusion test, clinical isolates, bacteria 4819.
 cephalosporins, Streptococcus group D, media effects on 3095.
 cephalothin, quality control 4828.
 ciprofloxacin, aerobic bacteria, anaerobic bacteria 4730.
 clinical isolates, Bifidobacterium 4043.
 clinical isolates, Branhamella catarrhalis testing 3092.
 clinical isolates, dilution tests, laboratories, comparison 483.
 clinical isolates, gram-positive cocci, gram-negative bacilli, anaerobic
 bacteria, eye infection 5757.
 clinical isolates, hystereotomy postoperative infection, man 9177.
 clinical isolates, R factors, characterization, antibiotic resistance, antibiotic
 sensitivity testing, clinical isolates, Streptococcus aureus 9178.
 clinical isolates, Streptococcus pneumoniae 9153.
 clinical isolates, urinary tract 9158.
 clinical microbiology 488.
 correlation, Clostridium difficile plasmids 1372.
 cormueryn, gram-negative bacteria, gram-positive bacteria, antibiotic
 synergism, hydroxy quinolones 6557.
 dental plaque, antibiotics prophylaxis, endocarditis, man 2252.
 dental plaque bacteria 5753.
 dilution tests, bactericidal activity, Streptococcus aureus 7425.
 dilution tests, methodology, comparison, gram-negative bacteria 7621.

Antibiotic sensitivity testing, (continued)

- dilution tests, Mycoplasma, animal isolates, chickens 3087.
 disc-diffusion test, apacillin, quality control 7439.
 disc-diffusion test, bacteria, use, Mueller-Hinton agar 3077.
 disc-diffusion test, cefotaxime, bacteria 1387.
 disc-diffusion test, methodology, Legionella 7418.
 disc-diffusion test, potency, association, quality control 7421.
 disc-diffusion test, standardization, quality control 8348.
 drug sensitivity testing, fungi 8346.
 Eikenella corrodens, β -lactam antibiotics, fosfomicin 4793.
 Enterobacteriaceae, Pseudomonas aeruginosa, measuring techniques, automated methods comparison 3081.
 Enterobacteriaceae, R factors, clinical isolates, nosocomial infection 4693.
 equipment, Staphylococcus aureus 3093.
 erythromycin, clindamycin, gentamicin, tetracycline, antibiotic resistance
 resistance Staphylococcus aureus 7424.
 Escherichia coli, animal isolates 7410.
 Escherichia coli, animal isolates, pigs 6500.
 Escherichia coli, clinical isolates, colibacillosis, sheep 5756.
 Escherichia coli, clinical isolates, diarrhea, neonates, pigs 5758.
 Escherichia coli, mecillinam, cefoxitin, gentamicin, cotrimoxazole, ampicillin,
 doxycycline, cephalothin, chloramphenicol 7440.
 factors affecting, methodology, reviews 3282.
 R factors characterizing, clinical isolates, Staphylococcus aureus 9178.
 gentamicin, quality control, mathematical models, Staphylococcus aureus,
 Escherichia coli, Pseudomonas aeruginosa 1400.
 gentamicin sulfate, neomycin sulfate 4652.
 gram-negative bacteria, ticarcillin + clavulanic acid 4786.
 gram-positive bacteria, intestinal microflora, animal isolates, growth
 regulators, feeds additives 3729.
 Haemophilus influenzae 2250.
 Haemophilus influenzae, ampicillin, cefamandole, chloramphenicol, MS-2 system
 498.
 Haemophilus influenzae, clinical isolates 4812.
 Haemophilus influenzae, clinical isolates, antibiotic resistance, ampicillin,
 chloramphenicol, incidence, Spain 6420.
 Halobacteriaceae 6497.
 identification, Yersinia 694.
 in vitro, Escherichia coli, Salmonella, Shigella, nosocomial environment clinical
 isolates 6502.
 inoculum, effects on, methodology 484.
 β -lactam antibiotics 3089.
 β -lactam antibiotics, aminoglycoside antibiotics, inoculum size effects on,
 Neisseria gonorrhoeae 7426.
 β -lactam antibiotics, antibiotic synergism, aminoglycoside antibiotics,
 Pseudomonas aeruginosa 7417.
 β -lactam antibiotics, Pseudomonas aeruginosa 4801.
 Legionella pneumophila, intracellular killing, macrophages, guinea-pigs 6506.
 Leptospira 1373.
 media, bacteria 9151.
 media production 9152.
 methicillin, Staphylococcus, clinical isolates, Italy 7441.
 methodology, comparison 7625.
 methodology comparison, blood culture isolates 2240.
 moxalactam, Bacteroides 6514.
 Mycobacterium tuberculosis, radiometry 3051.
 Mycoplasma, Ureaplasma, isolation, semen, cattle 7473.
 Neisseria gonorrhoeae 1374.
 Neisseria gonorrhoeae 4804.
 Neisseria gonorrhoeae, β -lactamase production relationship 1377.
 Neisseria gonorrhoeae, gonorrhea epidemiology, man 482.
 Neisseria gonorrhoeae, sexually-transmitted diseases isolates 5752.
 Nocardia asteroides 3030.
 nutrition, Klebsiella pneumoniae, wood decay 4423.
 penicillin G, β -lactam antibiotics, Bacteroides 9159.
 penicillin, Staphylococcus aureus 9193.
 polymyxin B, gram-negative bacteria, characterization 6548.
 prognosis relationship 4798.
 proteus, media (culture), methodology 433.
 Proteus penneri 9162.
 Pseudomonas aeruginosa 3079.
 Pseudomonas aeruginosa, aminoglycoside antibiotics, disc-diffusion test,
 statistical analysis 479.
 Pseudomonas aeruginosa, cephalosporins, moxalactam, cefotaxime 1383.
 Pseudomonas aeruginosa, clinical isolates 7416.
 Pseudomonas aeruginosa, clinical isolates, epidemiology, hospitals 4800.
 Pseudomonas aeruginosa, cystic fibrosis clinical isolates 9179.
 Pseudomonas aeruginosa, Escherichia coli, avoparcin, flavomycin, virginiamycin
 9215.
 quality control, antibiotic resistance, clinical microbiology 4688.
 quality control, clinical microbiology laboratories, Norway 4040.
 rifampin antibacterial activity 7447.
 Rochalimaea quintana, characterization 6495.
 Salmonella, clinical isolates 7414.
 Salmonella gera, Salmonella sofia, Salmonella serotypes 7415.
 Salmonella, isolation, Italy 9180.
 serum bactericidal activity, Staphylococcus aureus, media comparison, infection,
 man 4788.
 standardization, bacteria cell culture 1380.
 standardization, methodology 7401.
 Staphylococcus clinical isolates 485.
 Staphylococcus, clinical isolates 3078.
 Staphylococcus, Streptococcus, clinical isolates, mastitis, buffaloes 4810.
 Streptococcus faecalis 4808.
 Streptococcus group G, clinical isolates 4814.
 Streptococcus pneumoniae, β -lactam antibiotics, rifampicin, vancomycin,
 cotrimoxazole 6503.
 Streptococcus, use, tetracycline blue 3083.
 urinary tract clinical isolates, methodology 3315.
 use, fungi, gram-negative bacteria, growth, synthetic media 9155.
 use hypersensitivity mutants, β -lactam antibiotics, bacteria 6496.
 Vibrio parahaemolyticus isolation, otitis media, man 3094.
 Vibronaceae, animal isolates 477.
 Yersinia enterocolitica, clinical isolates, animal isolates 7398.

Antibiotic SQ 28,332,

fermentation, structure, antibacterial activity, taxonomy, Flexibacter 1448.

Antibiotic SQ 28,502,

fermentation, biological properties, Flexibacter, taxonomy 1450.

Antibiotic SQ 28,503,

fermentation, biological properties, Flexibacter, taxonomy 1450.

Antibiotic synergism,

- actithiazic acid + cephalaxin, antibacterial activity, Escherichia coli 1390.
 L-alanyl-L-1-aminoethylophosphonic acid + nocardin A, antibacterial activity,
 Pseudomonas aeruginosa 6554.
 aminoglycoside antibiotics + β -lactam antibiotics, Pseudomonas aeruginosa 4807.
 amphotericin + metacycline, Candida albicans 7378.
 ampicillin + streptomycin, \pm chloramphenicol, antibacterial activity,
 Pseudomonas aeruginosa 8349.
 antibacterial activity, clavulanic acid, sulbactam, Acinetobacter calcoaceticus
 4732.
 aztreonam + sisomicin, Pseudomonas aeruginosa antibacterial activity, kinetics
 4836.
 carbapenem + rifampicin, + gentamicin, + cotrimoxazole, Pseudomonas maltophilia
 3091.
 cefsulodin + sulbactam, + cefoxitin, + cefotaxime, antibacterial activity,
 Bacteroides 6512.
 cotrimoxazole, antibacterial activity, pharmacokinetics, reviews 5731.
 coumestrol, antibiotic sensitivity testing, gram-negative bacteria,
 gram-positive bacteria, hydroxy quinolones 6557.
 gentamicin, penicillin, clindamycin, metronidazole, Bacteroides melaninogenicus,
 Bacteroides fragilis 3118.
 gentamicin, penicillin G, vancomycin, cefotaxime, bactericidal activity,
 Streptococcus group G 7423.
 imipenem, amikacin, cotrimoxazole, cefotaxime, Nocardia asteroides 480.
 β -lactam antibiotics + amikacin, antibacterial activity 1391.
 β -lactam antibiotics + amikacin, antibacterial activity, Enterobacteriaceae
 9165.
 β -lactam antibiotics, aminoglycoside antibiotics, antibiotic sensitivity
 testing, Pseudomonas aeruginosa 7417.
 β -lactam antibiotics, aminoglycoside antibiotics, bactericidal activity,
 Pseudomonas aeruginosa 7403.
 n:azlocillin, antibacterial activity, bactericidal activity 7412.
 oxycillin, antibacterial activity, sepsis experimental infection, clinical trials
 6585.
 penicillin, streptomycin, Streptococcus antibiotic resistance 144.
 rifampicin + ampicillin, + chloramphenicol, antibacterial activity, Haemophilus
 influenzae type B 9166.
 rifampicin, vancomycin, antibiotic sensitivity testing, bactericidal activity,
 Staphylococcus aureus 7413.
 rifamycin, antibacterial activity, Staphylococcus epidermidis 8359.
 sisomicin + mezlocillin + azlocillin, Escherichia coli, Klebsiella pneumoniae,
 Pseudomonas aeruginosa 2271.
 Streptococcus, cefotaxime, aminoglycoside antibiotics 1382.
 temocillin, β -lactam antibiotics, antibacterial activity, Enterobacteriaceae,
 Pseudomonas aeruginosa, Staphylococcus aureus 3122.
Antibiotic TA,
 Myxococcus xanthus, adherence, antibacterial activity, characterization 9211.
 Myxococcus xanthus, biosynthesis, amino acids precursors 1421.
Antibiotic tolerance,
 oxacillin, dilution tests comparison, Staphylococcus aureus 6435.
 penicillin, Streptococcus group B 7317.
 Streptococcus 6434.
 Streptococcus, penicillin, methodology 435.
 Streptococcus, penicillin screening methodology 1308.
Antibiotic U-63196E,
 antibacterial activity 4825.
Antibiotic U-64846,
 Streptomyces braegensis biosynthesis, isolation, characterization, antibacterial
 activity 4877.
Antibiotic X-14885A,
 biosynthesis, isolation, Streptomyces, biological properties 1432.
 isolation, X-ray crystallography, antibacterial activity, Treponema
 hyodysenteriae, gram-negative bacteria 1442.
Antibiotic 2-11-A,
 structure, Streptomyces 6552.
Antibiotic 2-11-B,
 structure, Streptomyces 6552.
Antibiotics,
 activity, relationship, structure, physiology, bacteria 9168.
 administration, antibiotic resistance, bacteria, animal isolates, cattle, dairies
 430.
 antibacterial activity, biliary tract infection, Staphylococcus, bile salts
 effects on 4042.
 antibacterial activity, books 8496.
 antibacterial activity, calcium ionophores, Streptomyces coelicolor 2296.
 antibacterial activity, determination, counting methods 2239.
 antibacterial activity, infectious diseases chemotherapy, antibiotic resistance
 5089.
 antibacterial activity, inhibition, protein biosynthesis, nucleic acids,
 cytoplasmic membranes, cell walls biosynthesis, tetrahydrofolate biosynthesis
 9174.
 antibacterial activity reduction, Bactec test media, Thio broth 6458.
 antibacterial activity, reviews 4068.
 antibacterial activity, Staphylococcus aureus, phagocytosis, viability,
 photometry, methodology 6771.
 antibacterial activity, structure-activity relationships, clinical trials 9172.
 antibacterial activity, susceptibility, stimulation, polymyxins derivatives
 binding outer membranes, gram-negative bacteria 4803.
 antifungal activity, relative inhibition factors measurements, dose-response
 effects 4017.
 antimicrobial activity, biochemical characteristics, reviews 6494.
 antimicrobial activity, clinical trials, pharmacokinetics, pharmacology,
 pediatrics, reviews 5942.
 antimicrobial activity, structure-activity relationships, antibiotic resistance
 1376.
 antitumor activity, Russula emetica 6065.

Antibiotics, (continued)

- assays methodology 9173.
Bacillus subtilis, production, oxafun, inhibition, antagonism, Phoma betae, rhizosphere 2139.
 binding, alginate acid, role, antibiotic resistance, *Pseudomonas aeruginosa* 6411.
 binding, serum proteins 6577.
 biosynthesis, gene regulation, microorganisms 3374.
 biosynthesis, genetic engineering, microorganisms 5764.
 biosynthesis, microorganisms, pH levels 2246.
 biosynthesis, nutrient requirements, optimization, *Streptomyces galbus* 4875.
 biosynthesis, recombination, *Streptovorticillium mycohepticum* x *Streptomyces coelicolor* 7411.
 biosynthesis, relationship antibiotic resistance, bacteria, reviews 9057.
 biosynthesis, *Streptomyces clavuligerus* aspartate kinase defective mutant, diaminoimipemic acid contents 2257.
 biosynthesis, *Verticillium dactyliophila* liquid culture 972.
 books 1691.
 chromatography, books 6795.
 citrinin, N.M.R., structure, biosynthesis, *Aspergillus terreus* 6570.
 +copper sulfate, disease control, canker, downy mildew, powdery mildew 8139.
 decontamination, gram-negative bacteria, shoots culture, trees 5762.
 determination, bacteria extracts, electrochemistry methodology 3277.
 disease control, plant diseases 1221.
 DNA binding, solvents role 9175.
 effects on 5'-inosinic acid biosynthesis, *Brevibacterium ammoniagenes* 6063.
 effects on *Bacillus subtilis*, sporulation, stringent response 2242.
 effects on *Escherichia coli* enterotoxins, biosynthesis, properties 228.
 effects on, *Inc* plasmids, *Enterobacteriaceae*, antibiotic resistance 6423.
 effects on rRNA active sites, ribosomes, reviews 1428.
 effects on *Staphylococcus aureus* interactions, fibronectin 495.
Escherichia coli, *Pseudomonas aeruginosa*, wild type, envelopes mutants, sensitivity association, cell membranes role 3080.
 +folic acid, antibiotic resistance, bacteria, livestock, reviews 9062.
 feeds, relationship R factors, antibiotic resistance, animal isolates, *Escherichia coli* 4003.
Haemophilus influenzae, reviews 6408.
 +hydroxyketopentanes, *Streptomyces variegatus* sp.nov. biosynthesis, antibacterial activity, antifungal activity 2309.
 +*Lactobacillus acidophilus*, oral administration, biotin nutrient availability, intestinal microflora, chickens 2750.
 leukocytes (polymorphonuclear) penetration, antibacterial activity, man 492.
 low molecular weight enzymes inhibitors, reviews 490.
 microorganisms biosynthesis, books 2541.
 nalidixic acid reaction mechanisms, DNA supercoiling, DNA gyrase inhibition, *Escherichia coli* 6560.
 palladium detection, spectrophotometry methodology 496.
 peptides, structure, antibacterial activity, antifungal activity, *Paecilomyces marquandii* 8742.
 production, *Actinomyces recticatena* sp.nov., rubromycin, griseoridin 4060.
 production, biotechnology, books 5091.
 production, cloning vectors, genes, *Streptomyces* 4845.
 production, fungi, association, morphology 2255.
 production, gramicidin S synthetase multienzyme complexes, inactivation control, *Bacillus brevis* 1375.
 production, industrial applications, fungi, yeasts 9169.
 production industrial wastes, *Pseudomonas* isolation R factors characterization, antibiotic resistance 2208.
 production, microorganisms, books 9343.
 production, oils sterilization, continuous culture, fermenters 9154.
 production, optimization, fermentation, purification 4041.
 production, packaging, standards, USSR 493.
 production, *Pseudomonas putida*, *Pseudomonas fluorescens*, stimulation rats growth, *Citrus jambhiri*, *Citrus sinensis* 5625.
 production, relationship spore germination, *Bacillus levoris* 4038.
 production, screening, *Glutocladia* 528.
 production, wastewater treatment isolates, bacteria 9234.
 prophylaxis, endocarditis, man, dental plaque antibiotic sensitivity testing 2252.
 purification, characterization, antibacterial activity, antifungal activity, *Streptomyces galbus* 4881.
 purification methodology, synthetic membranes 3074.
 residues, feces, inhibition methanogenesis, digestion (anaerobic) 8396.
 ribostamycin like, synthesis 5790.
 sensitivity, anaerobic bacteria, inflammatory diseases, oral cavity, man 7405.
 sensitivity, *Escherichia coli* injuries, cell surface hydrophobicity 2241.
Staphylococcus aureus, *Enterobacteriaceae*, growth, blood culture, correlation, hypertonicity 783.
 sterilization, radiation 1378.
 stimulation, IMP biosynthesis, *Brevibacterium ammoniagenes* 115.
 stimulation, IMP biosynthesis, *Brevibacterium ammoniagenes* 952.
 structure, assays, conferences 847.
 structure, resistance, antimicrobial activity, bacteria, reviews 2234.
 structure-activity relationships, antibiotic resistance, mechanisms, reviews 9063.
 structure-activity relationships, reviews 9170.
 susceptibility, antibacterial activity, membrane permeability mutants, gene mapping, *Escherichia coli* 4794.
 susceptibility, envelopes, mutation, enhancement, *Neisseria gonorrhoeae*, clinical isolates 5761.
 treatment, bacteria infection, man, books 2538.
 treatment, little leaf, nicksia-like organisms, mycoplasma-like organisms, disease transmission, *Wissadula periploclia*, Jamaica 2047.
 treatment, selection, antibiotic resistance, bacteria, man 6404.
 uptake, role antibiotic resistance mechanisms, bacteria, reviews 9049.
 use, bacteria antibiotic resistance relationship, hospitals 3030.

Antibodies, (continued)

- adenovirus (human) 5 hexons, counter immunoelectrophoresis, immunodiagnosis 2439.
 adenovirus, nitrocellulose enzyme-linked immunosorbent assay 5020.
 adsorption, immobilized cells, radiation polymerization, *Escherichia coli* 5896.
 aflatoxin Q1, production, use enzyme-linked immunosorbent assay 3743.
 Africa swine fever virus, detection, immunoperoxidase plaque assay methodology 634.
Aspergillus fumigatus, detection, serological tests 5390.

Antibodies, (continued)

- association mycoloxins, production, use, detection, food contamination, serum levels, reviews 7082.
 avian encephalomyelitis virus, enzyme-linked immunosorbent assay use detection, chickens 5019.
 avian infectious bronchitis virus, infectious bursitis virus, Newcastle disease virus, detection, enzyme-linked immunosorbent assay, methodology 5017.
 bovine leukemia virus, detection, comparison, radioimmunoassay, immunodiffusion 3256.
 Brucella abortus, detection, enzyme-linked immunosorbent assay methodology, pigs serum 5063.
 Brucella ovis, sheep, complement fixation comparison enzyme-linked immunosorbent assay, detection 4204.
 bunyavirus, detection, hemolysis methodology 4164.
 Chlamydia trachomatis, immunofluorescence, respiratory tract diseases, man 4196.
 Chlamydia difficile toxins, detection, enzyme-linked immunosorbent assay 230.
 Clostridium tetani, detection, radioimmunoassay 1610.
 Clostridium tetani, enzyme-linked immunosorbent assay methodology, man 780.
 Coccidioides immitis, detection methodology, complement fixation, immunodiffusion 1674.
 Coccidioides immitis, quantitation, complement fixation comparison immunodiffusion 815.
 coronavirus, detection, radioimmunoassay, enzyme-linked immunosorbent assay 2430.
 cytomegalovirus (human), detection, complement fixation, enzyme-linked immunosorbent assay, indirect fluorescent antibody test 1551.
 cytomegalovirus, screening, blood donors, methodology comparison 2448.
 detection, enzyme-linked immunosorbent assay methodology, *Campylobacter fetus* subsp.jejuni enteritis, man 782.
 detection, enzyme immunoassay methodology, varicella-zoster virus membranes antigens 5880.
 detection, enzyme-linked immunosorbent assay, immunodiagnosis, Chlamydia trachomatis, Chlamydia psittaci 4183.
 detection, enzyme-linked immunosorbent assay, radioimmunoassay, arenavirus 8455.
 detection, hemagglutination inhibition, neutralization, avian infectious bronchitis virus, chickens 3245.
 detection, hemorrhagic enteritis virus, gel diffusion, enzyme-linked immunosorbent assay, turkeys 4153.
 detection, indirect fluorescent antibody test, mouse hepatitis virus infection, cell culture 590.
 detection, protein A agglutination, *Yersinia pseudotuberculosis* subsp.pestis 5029.
 2,3-dihydro-2,3-dihydroxyfloxacin B1, production, cross-reactivity aflatoxin B1 3740.
 enterovirus, serum, detection, radioimmunoassay 8448.
 enzyme-linked immunosorbent assay detection, gram-negative bacteria, endotoxins, blood 1939.
 enzyme-linked immunosorbent assay, detection, use, influenza virus, protein M 1541.
 Epstein-Barr virus antigens, detection, enzyme-linked immunosorbent assay 6739.
 equine infectious anemia virus, detection, enzyme-linked immunosorbent assay methodology 4162.
 gram-negative bacteria endotoxins, enzyme-linked immunosorbent assay detection, blood 1939.
 Haemophilus influenzae, detection, enzyme-linked immunosorbent assay, comparison, radioimmunoassay 2515.
 hemorrhagic enteritis virus, detection, enzyme-linked immunosorbent assay methodology, chickens 9281.
 hemorrhagic fever, detection, indirect hemagglutination, viruses, man 7570.
 hepatitis B core antigen, measurement, association, immunoglobulin M, radioimmunoassay, methodology 7565.
 herpes simplex virus, detection, enzyme-linked immunosorbent assay 631.
 hog cholera virus, bovine diarrhoea-mucosal disease virus, detection, neutralization, immunoperoxidase test, pigs 6743.
 immunoglobulin A, Epstein-Barr virus, autoradiography, immunodiagnosis, nasopharynx carcinoma, man 4982.
 influenza, determination, protein A tests, man 3253.
 influenza virus, complement fixation assays 3235.
 influenza virus neuraminidase, detection, enzyme-linked immunosorbent assay methodology 1567.
 +interferon, antiviral activity, conjunctiva cell culture, man 2227.
 Japanese encephalitis virus, cerebrospinal fluid, man, radioimmunoassay, detection 615.
 β-lactamase deactivation, guancillin, cephaloridine substrates, *Staphylococcus aureus* 5156.
 Legionella pneumophila, counter immunoelectrophoresis, immunodiagnosis, Legionnaire's disease 2478.
 Legionella pneumophila, detection, immunofluorescence, solid phase methods 1656.
 Legionella pneumophila, kinetics dependent enzyme-linked immunosorbent assay detection 2512.
 microinjection, effects on, interferon, antiviral activity 9111.
 Mycobacterium, leprosy, detection, enzyme-linked immunosorbent assay 5057.
 Mycobacterium, leprosy, detection, enzyme-linked immunosorbent assay 5901.
 Mycoplasma hyopneumoniae, detection, enzyme-linked immunosorbent assay comparison, indirect hemagglutination, complement fixation 740.
 Mycoplasma pneumoniae, detection, complement fixation comparison enzyme-linked immunosorbent assay 1863.
 Mycoplasma pulmonis, detection, immunoassays 5021.
 Neisseria gonorrhoeae, detection, radioimmunoassay methodology, man 1586.
 Neisseria meningitidis, detection, spin probes plasma membranes immunoassays 3325.
 Pasteurella, detection, indirect hemagglutination 723.
 Pasteurella multocida, enzyme-linked immunosorbent assay, detection, chickens 5074.
 poliovirus, titration, sensitivity, HEp-2 cells, Vero cells 5003.
 Pseudomonas aeruginosa sodium alginate extracellular polymers, detection, enzyme-linked immunosorbent assay 761.
 rabies virus, detection, determination, counter immunoelectrophoresis correlation, fluorescent antibody test, rabbits 3250.
 respiratory syncytial virus, detection, enzyme-linked immunosorbent assay 1554.
 respiratory syncytial virus, enzyme-linked immunosorbent assay methodology, comparison, complement fixation, neutralization 5008.
 rubella virus, detection, hemagglutination inhibition 616.
 rubella virus, detection, immunofluorescence, immunoassays, methodology 637.
 rubella virus, detection, latex agglutination, methodology comparison 1540.
 rubella virus, detection, latex agglutination methodology, serum, man 1539.
 rubella virus, screening, hemolysis assays, man 6745.

Antibodies, (continued)

- specificity, hepatitis B surface antigen synthetic peptides, vaccines, hepatitis B virus 6617.
- specific, respiratory syncytial virus, immunoprecipitation, electrophoresis, methodology 7566.
- Streptococcus group B, enzyme-linked immunosorbent assay methodology, serum, man 3259.
- teichoic acid, comparison, α -hemolysin, measuring techniques, diagnosis, bacteremia, endocarditis, *Staphylococcus aureus*, man 7620.
- tick-borne encephalitis virus, immunoglobulin M, detection, indirect fluorescent antibody test, 2-mercaptoethanol, man 7557.
- togavirus, detection, hemolysis, use seroepidemiology, man 4996.
- Ureaplasma urealyticum, detection, enzyme-linked immunosorbent assay optimization 4178.
- vaccinia-zoster virus, detection, use, anti complement immunofluorescence, serum, man 1566.
- vesicular stomatitis virus, detection, counter immunoelectrophoresis, methodology 7569.
- Antibody response,**
- Aspergillus fumigatus*, measuring techniques, enzyme-linked immunosorbent assay, diffusion tests 2533.
- BK virus, immunoglobulin G, immunoglobulin M, serum levels, radioimmunoassay, methodology 9279.
- combined vaccines, synthetic peptides, *Corynebacterium diphtheriae* toxins, *Streptococcus*, hepatitis B surface antigen, mice 9219.
- fowl cholera vaccination, enzyme-linked immunosorbent assay, indirect hemagglutination, chickens 3343.
- influenza virus hemagglutinins genes, vaccinia virus transfection, hamsters, rabbits 4887.
- mumps virus vaccines, enzyme-linked immunosorbent assay comparison neutralization 2436.
- rabies virus vaccines, membranes glycoproteins, lysosomes incorporation, mice 6660.
- synthetic peptides, palmitic acid carriers, vaccines 6588.
- vaccines, *Neisseria meningitidis* lipopolysaccharides conjugation *Clostridium tetani* toxoids, rabbits 1453.
- vaccines, *Streptococcus pneumoniae*, capsules polysaccharides, enzyme-linked immunosorbent assay, children 682.
- Anticapsin,**
- inactivation, glycosaminophosphate isomerase (glutamine-forming) activity, *Escherichia coli*, *Pseudomonas aeruginosa*, *Arthrobacter aureus*, *Bacillus* inhibition, bacteria, glycosaminophosphate isomerase (glutamine-forming) 8382.
- Anticaria gemmatilis,**
- biological control, epizootology, *Nomurea rileyi* 5214.
- pest control, biological control, temperature, dosage, effects on, virulence, *Nomurea rileyi*, *Pseudoplusia includens* 5212.
- Anticarm agents,**
- effects on bitterness compounds formation, fermentation, beer, yeasts 3587.
- Antifungal agents,**
- afatoxin B1 production, effects on, *Aspergillus parasiticus* 3745.
- +amphotericin B+rifampicin, antifungal activity, *Aspergillus* 5785.
- antibiotics, antifungal activity, relative inhibition factors measurements, dose-response effects 4017.
- association, *Aspergillus parasiticus* aflatoxins, acetic acid incorporation 217.
- clinical aspects, antifungal activity, pharmacokinetics 2222.
- disease control, disease resistance, Brassica, clurobut, *Plasmodiophora brassicae* 8912.
- detection 1342.
- drug sensitivity testing, *Candida albicans*, *Aspergillus fumigatus* 8308.
- effects on growth, *Aspergillus flavus*, *Aspergillus parasiticus* 4019.
- Pinus densiflora* wood, disease resistance, *Fomes annosus* 354.
- Ricinus communis*, induction, Rhizopus stolonifer polygalacturonase role 297.
- structure, resistance, antimicrobial activity, fungi, reviews 2234.
- α Antigen,**
- detection, enzyme-linked immunosorbent assay methodology, serum, man 8456.
- α Antigen,**
- detection, hepatitis B virus infection, radioimmunoassay solid phase methods, man 8454.
- Antigen O,**
- agglutination, serotyping, *Klebsiella* 9320.
- lipopolysaccharides structure, *Vibrio cholerae* 3529.
- polysaccharides structure, *Escherichia coli* 1826.
- polysaccharides structure, *Escherichia coli* 4364.
- polysaccharides, structure, *Shigella dysenteriae* 1827.
- Salmonella*, vaccines production, immunogenicity 2322.
- Vibrio cholerae*, oligosaccharides structure 1825.
- Antigen T,**
- SV40 DNA binding sites, monoclonal antibodies, immunoassays 589.
- Antigen V,**
- Salmonella typhi*, detection, agglutination, comparison, enzyme-linked immunosorbent assay, use, diagnosis 663.
- Antigen-antibody complexes,**
- electron microscopy, detection, viruses 653.
- Antigen-antibody interactions,**
- pili, antigenic determinants, structure-activity relationships, synthetic peptides, *Escherichia coli* 6657.
- Antigenemia,**
- diagnosis, agglutination methodology, Legionnaire's disease, man 1587.
- Antigenic characteristics,**
- Bacillus thuringiensis* subsp. colmeri, pathogenicity, Insecta 6913.
- hydrangea mosaic virus, plant viruses, isolation, *Hydrangea macrophylla* 2017.
- luteovirus, identification, Gramineae, China, People's Rep. 8796.
- Verrucilium albo-atrum conidia, relationship virulence, *Humulus lupulus* 2006.
- Antigenic determinants,**
- capsid protein, vaccine production, poliovirus 6614.
- glycoproteins, rabies simplex virus 1, gene expression, use vaccines production, cell lines, mammalian cells 6591.
- glycoproteins, localization, vaccines production, rabies virus 6632.
- gram-negative bacteria hybrids, vaccines production 6644.
- hepatitis B surface antigen, vaccines, hepatitis B virus 6612.
- pili, synthetic peptides, structure-activity relationships, antigen-antibody interactions, vaccines, *Escherichia coli* 6657.
- proteins, reovirus serotypes, vaccines production 6613.
- synthetic proteins, vaccines production, immunogenicity, herpes simplex virus 6639.
- Antigenic variants,**
- grapevine Bulgarian latent virus, characterization, plant diseases 5451.
- Antigenicity,**
- antigens, vaccines production, feline panleukopenia virus 6619.
- foot-and-mouth disease virus synthetic peptides vaccines 6659.
- hemagglutinins, expression, cloning vectors, vaccines production, influenza virus 6636.
- poliovirus multiple forms, comparison, *Clostridium botulinum* 6213.
- poliovirus 3, vaccines production 6624.
- polysaccharides, structure, *Shigella dysenteriae* 4363.
- rabies virus, association vaccines 1451.
- vaccines, *Corynebacterium diphtheriae* synthetic peptides, adjuvants, N-acetyl-muramyl-L-alanyl-D-isoglutamine, *Clostridium tetani* toxoids, mice 6656.
- vaccines production, hemagglutinins, reovirus 6627.
- vaccines, *Salmonella typhi*, *Shigella sonnei* association 4890.
- Antigens,**
- adenovirus, detection, enzyme-linked immunosorbent assay 623.
- adenovirus, nitrocellulose enzyme-linked immunosorbent assay 5020.
- African swine fever virus, detergents solubilization, vaccines, immunity, pigs 1452.
- antigenicity, vaccines production, feline panleukopenia virus 6619.
- bacteria, cerebrospinal fluid, detection, agglutination comparison counter immunoelectrophoresis 2483.
- bacteria, detection, body fluids, latex agglutination, use, *Haemophilus influenzae*, comparison, *Streptococcus pneumoniae*, *Neisseria meningitidis*, man 3310.
- Bacteroides fragilis, detection, enzyme-linked immunosorbent assay, urine, experimental infection, rats 6772.
- Bacteroides fragilis, enzyme-linked immunosorbent assay detection, urine, man 3310.
- blood group O, use, Enterobacter cloacae serotyping 3296.
- bluetongue virus, detection, immunodiffusion 4989.
- bluetongue virus, epizootic hemorrhagic disease virus, preparation methodology, use, gel diffusion 3240.
- Brucella abortus*, agglutination, Rose Bengal plate test, immunodiagnosis, Brucellosis 7589.
- Brucella abortus*, detection, enzyme-linked immunosorbent assay 6763.
- Brucella*, identification, agglutination 6759.
- Candida albicans*, detection, enzyme-linked immunosorbent assay methodology 2523.
- capsules, polysaccharides, carbohydrate composition, *Klebsiella pneumoniae* 4361.
- Chlamydia, purification, ion-exchange chromatography 728.
- cloning, gene expression, neutralization, vaccines production, herpes simplex virus 6610.
- colonization factors, *Escherichia coli*, hemagglutination, clinical microbiology 701.
- comparison, African swine fever virus, immunodiagnosis, enzyme-linked immunosorbent assay 1542.
- Cryptosporidium neofomans, detection, body fluids, methodology comparison, man 2531.
- cytomegalovirus (human) envelopes, vaccines, immunity (cell-mediated), immunity (humoral), guinea-pigs 4072.
- Dermatophytes conglutins, precipitation methodology comparison 1627.
- detection, agglutination, *Streptococcus* group A 1595.
- detection, enzyme-linked immunosorbent assay, Chlamydia 5068.
- detection, enzyme-linked immunosorbent assay, radioimmunoassay, arenavirus 8455.
- detection, protein A agglutination, arbovirus 4991.
- detection, protein A agglutination, *Yersinia pseudotuberculosis* subsp.pestis 5029.
- Epstein-Barr virus, antibodies, detection, enzyme-linked immunosorbent assay 6739.
- Epstein-Barr virus, immunoprecipitation, methodology 647.
- equine infectious anemia virus, detection, enzyme-linked immunosorbent assay methodology 4162.
- fragments, trisaccharides synthesis, *Shigella flexneri* 6050.
- fungi pathogens, disinfection, thimerosal, formaldehyde, clinical microbiology 4162.
- genes cloning, vaccines production, genetic engineering, viruses 5807.
- genes cloning, vaccines production, rotavirus 6643.
- genetic engineering, vaccines, hepatitis B virus, characterization 6640.
- Haemophilus influenzae* b polyribose phosphate, detection, agglutination tests, body fluids, man 1584.
- Haemophilus influenzae*, isolation, vaccines production, immunogenicity, cattle 4895.
- Haemophilus influenzae*, latex, agglutination detection, pigs 2520.
- Haemophilus influenzae* type b, detection methodology comparison, body fluids, man 4189.
- Haemophilus influenzae* type b, latex agglutination, comparison, phadebact test, detection, cerebrospinal fluid 795.
- herpes simplex virus 1, detection, enzyme-linked immunosorbent assay, cerebrospinal fluid, encephalitis, man 652.
- herpesvirus (equine) 1, detection, enzyme-linked immunosorbent assay 3246.
- La Crosse virus, enzyme immunoassay, *Aedes triseriatus* 609.
- Legionella pneumophila, use, indirect fluorescent antibody test, heat treatments, comparison, formalin 792.
- lipopolysaccharides, carbohydrate composition, structure, *Shigella boydii* 4362.
- lipopolysaccharides, carbohydrate composition, structure, *Shigella boydii* 4362.
- Mycoplasma gallisepticum, *Mycoplasma synoviae*, yields, pH, effects on 5022.
- Neisseria gonorrhoeae*, detection, enzyme immunoassay 4180.
- nucleocapsids, pseudorabies virus, use, skin tests, pigs 617.
- Paracoccidioides brasiliensis, production methodology, immunodiffusion relationship 4228.
- peptide synthesis, use vaccines 4888.
- plant viruses, Oryza sativa, detection, latex agglutination 5416.
- production, hepatitis A virus cell culture, immunodiagnosis methodology 5007.
- protection, toxins, genes, *Bacillus anthracis*, cloning 1083.
- Pseudomonas aeruginosa* capsules, use complement fixation assays 2467.
- rabies virus, immunoelectron microscopy, localization, central nervous system, embedding, methodology 4899.
- ribosomes, *Neisseria gonorrhoeae*, passive hemagglutination, immunodiagnosis, gonorrhea, man 714.
- Rickettsia prowazekii, preparation, activity determination 4182.
- rindestrip virus, detection, complement fixation methodology 3257.
- rotavirus (human), detection, immunoassays solid-phase methods, feces, children 4169.
- screening, use, phase A plaques 624.
- skin tests, immunoassays, varicella-zoster virus 8447.

Antigens, (continued)

- Spiroplasma citri*, antisera, Vinca rosea infection pathogenesis 1968.
spring viremia of carp virus, detection, immunoperoxidasetest, fluorescent antibody test, organs, Cyprinus carpio 5888.
Staphylococcus aureus, detection, enzyme-linked immunosorbent assay methodology 5596.
Streptococcus, detection, agglutination methodology, blood culture 2460.
Streptococcus group B, detection, enzyme immunoassay methodology, man 5065.
Streptococcus group C, identification methodology, agglutination 2495.
Streptococcus sanguis pili, enzyme-linked immunosorbent assay methodology 1621.
synthetic, vaccines production, immunogenicity, influenza virus 6601.
synthetic, vaccines, toxins, *Vibrio cholerae* 6654.
synthetic, viruses, vaccines, production methodology 6625.
Treponema pallidum, use, enzyme-linked immunosorbent assay, methodology 2508.
viruses, radioimmunoassay, diagnosis, parainfluenza virus infection, man 9276.
use, enzyme immunoassay, diagnosis, parainfluenza virus 1, computer programs 8323.
varicella-zoster virus membranes, antibodies detection, enzyme immunoassay methodology 5880.
Vibrio cholerae cell surface, enzyme-linked immunosorbent assay methodology 1624.
viruses, immune response, vaccines development association, immune response 3178.
viruses, radioimmunoassay 6747.
Yersinia pseudotuberculosis subsp. *pestis*, detection, tissues, radioimmunoassay 1574.
- Antinflammatory agents,**
non-steroidal antiinflammatory drugs, free radicals, superoxide, hydroxide, inactivation, phase 72 4769.
- Antimicrobial agents,**
antibacterial activity, *Clostridium*, agar dilution test, animal isolates 3050.
antibacterial activity, urine specimens 3048.
antibacterial activity, *Candida albicans*, *Staphylococcus aureus*, *Escherichia coli*, tissue culture, *Peganum harmala* 8336.
antimicrobial activity, disinfectants, antiseptics, preservatives, bacteria, viruses, fungi 9137.
antimicrobial activity, factors affecting 1359.
antimicrobial activity, microorganisms, books 9343.
assays methodology 9173.
bacteriostasis, bactericidal activity, *Bacteroides fragilis*, clinical isolates 7402.
concentration, drug sensitivity testing, computer applications 4006.
dentures, sanitizers, bacteria, fungi 2420.
drug sensitivity testing, antibacterial activity, antifungal activity, efficacy 9138.
+ EDTA-tromethamine, antibacterial activity, gram-positive bacteria 4816.
inhibition, bacteria spores, food industry 7028.
preservatives, effects on *Aspergillus flavus* aflatoxin B1 biosynthesis, in vitro 7095.
removal equipment, use, recovery, fungi, bacteria, man 3228.
structure-activity relationships, reviews 9170.
susceptibility, agar diffusion test quality control 1379.
- Antimycobacterial agents,**
drug resistance, *Mycobacterium*, reviews 9061.
fatty acids, antibacterial activity 8298.
sodium hydroxide, bactericidal activity, *Mycobacterium* 3044.
- Antineoplastic drugs,**
antimicrobial activity 6487.
- Antioxiants,**
butylated hydroxyanisole, butylated hydroxytoluene, antimicrobial activity, food, reviews 8717.
production, structure, fermentation, *Penicillium janthinellum* 4397.
stabilization, amphotericin B, antifungal activity, *Candida albicans* 1406.
- Antiseptics,**
antibacterial activity, surfactants effects on 9261.
antimicrobial activity 9137.
antimicrobial activity, methodology 1525.
antiviral activity, rotavirus (human) 2232.
disease control, surgery, environmental hygiene, hospitals 1518.
infection, skin microflora, animal models 4141.
iodine, antimicrobial activity 2416.
trichosan, antibacterial activity 4011.
- Antisera,**
+ agar methodology, *Legionella* detection, isolation 1620.
Clostridium difficile, adsorption, bioassays, detection, toxins 5382.
Clostridium perfringens enterotoxins, preparation methodology 1959.
Corynebacterium sepeodonicum, immunofluorescence, microscopy, cross-reactivity, skin microorganisms, association, *Solanum tuberosum* 7188.
+ horseradish peroxidase conjugate, stains, bovine diarrhea-mucosal disease virus, detection, microscopy 4147.
immunoglobulin G, v-mos gene vaccines, inhibition transformation, vaccines models, Moloney sarcoma virus 6548.
production, *Apis mellifera* viruses 5891.
production, industrial applications, bacteria, viruses 9218.
production, standardization, *Mycoplasma* identification 6756.
production, *Vibrio cholerae* toxins, peptide synthesis, toxoids conjugate, vaccines 4078.
rabbits, *Pseudomonas cepacia* serotyping methodology 1636.
serological surveys, *Vibrio* identification 1590.
Spiroplasma citri antigens, Vinca rosea infection pathogenesis 1968.
- Antitoxins,**
Clostridium tetani, detection, enzyme-linked immunosorbent assay, neutralization, serum, man 4488.
Clostridium tetani, hemagglutination, enzyme-linked immunosorbent assay, neutralization 5383.
- Antitranspirants,**
use, disease control, leaf blotch, Septoria tritici, *Triticum aestivum*, powdery mildew, *Erysiphe graminis*, *Hordeum vulgare* 291.
- Antitubercular agents,**
antibiotic DL 8280, antibiotic resistance, *Mycobacterium tuberculosis* 7344.
antibiotic DL8280, antibacterial activity, *Mycobacterium tuberculosis* 9084.
disinfection, *Mycobacterium tuberculosis* 1319.
drug resistance, drug sensitivity testing, *Mycobacterium tuberculosis* 4717.
drug resistance, *Mycobacterium tuberculosis*, clinical isolates, USA, Texas 6422.
drug sensitivity testing, drug resistance, clinical isolates, *Mycobacterium tuberculosis* 6443.
drug sensitivity testing, *Mycobacterium fortuitum* 4719.
+ minocycline, antibacterial activity, *Mycobacterium tuberculosis* 4722.
pharmacology, reviews 5725.
sulfanilamido-naphthoquinones derivatives, synthesis, antibacterial activity,

Antitubercular agents, (continued)

- Mycobacterium tuberculosis* 5724.
- Antitumor agents,**
BCG, purification, cytoskeleton, *Mycobacterium bovis* 3542.
- Antitumor antibiotics,**
akrobomycin, production, isolation, characterization, *Actinomadura roseoviolacea* 3541.
 β -D-glucan, carbohydrate composition, structure, *Grifola frondosa* 5208.
production, fermenters, aerosols filtration, reduction, risks, occupational exposure 8624.
production, *Streptomyces pulveraceus* subsp. *fostraeus* 2638.
- Antiviral agents,**
antiviral activity, cell culture, herpes simplex virus, rubella virus 4770.
antiviral activity, clinical trials, reviews 5750.
antiviral activity, reviews 5745.
2,6-diamino-9-(2-hydroxyethoxymethyl)purine, radioimmunoassay methodology 2435.
dosage, antiviral activity, herpes simplex virus 1, computer programs 8323.
effects on, tobacco mosaic virus, cowpea chlorotic mottle virus, plant viruses 4024.
foliar applications, effects on cowpea chlorotic mottle virus infectivity, symptoms, *Vigna unguiculata* 3903.
+ α -interferon, antiviral activity synergism, varicella-zoster virus 4766.
peptide synthesis 4888.
structure, resistance, antimicrobial activity, viruses, reviews 2234.
susceptibility, varicella-zoster virus vaccines strains 4777.
treatment, viruses infection, man 2229.
viruses, antiviral activity, characterization, reviews 8326.
viruses inactivation 1347.
- Antermicin A,**
antibacterial activity, *Bacillus subtilis* 5798.
- Apelcillin,**
antibacterial activity 4840.
antibacterial activity, anaerobic bacteria 3101.
antibacterial activity, comparison, piperacillin, carbenicillin 6527.
antibacterial activity, *Pseudomonas aeruginosa* 9192.
disc-diffusion test, antibiotic sensitivity testing, quality control 7439.
- Aphanomyces,**
oospores, spore germination, viability, tetrazolium bromide staining 805.
- Aphanomyces euteiches,**
root rot, disease resistance, *Pisum sativum*, plant breeding 2852.
- Aphelenchus,**
predator-prey interactions, nematophagous fungi, Mexico 2126.
- Aphelenchus avenae,**
feeding, soil microorganisms 7263.
mycophagy, population levels, relationship mycoflora, soil, forests, *Pinus radiata*, crop fields, *Triticum aestivum* 8223.
- Aphidicolin,**
inhibition, DNA biosynthesis, archebacteria 7368.
- Aphididae,**
association, helper factor, disease transmission, tobacco etch virus, *Nicotiana tabacum* 4552.
biological control, *Entomophthora planchoniana* cell culture methodology 5938.
biological control, fungi, surveys 5944.
biological control, fungi, conifer, crop fields, British Isles 5233.
biological control, inoculum production, *Conidiobolus obscurus*, *Erynia neopaphidis* 5231.
biological control, research programs, *Verticillium lecanii*, *Entomophthorales* 5232.
disease transmission, *Dioscorea* ring mottle virus, host range, *Dioscorea alata* 3828.
honeydew, enhancement, *Septoria nodorum*, *Cochliobolus sativus*, infection, *Triticum aestivum* 3806.
integrated control, carbaryl + iprodione + *Verticillium lecanii*, inhibition, spore germination 2654.
vectors, barley yellow dwarf virus infection, Gramineae, interaction 1989.
vectors, disease spread, bean yellow mosaic virus, subterranean clover red leaf virus, epidemiology, *Vicia faba* 5405.
- Apils cracivora,**
vectors, cowpea aphid-borne mosaic virus disease transmission, *Vigna unguiculata* infestation resistance 7137.
- Apils gossypii,**
heredity, potato virus Y, disease transmission, *Datura metel* 3827.
role, disease transmission, potato virus Y, potato leaf roll virus, *Solanum tuberosum* 8023.
vectors, disease transmission, abaca mosaic virus, banana mosaic virus, *Musa textilis* 6276.
- Aphylophorales,**
fruit bodies, *Abies pinsapo* rot 5611.
- API test,**
Corynebacterium identification 5041.
detection, yeasts germ tubes 2528.
identification, *Bacillus* 9317.
identification, clinical isolates, anaerobic bacteria 7595.
identification, *Clostridium difficile*, methodology 7609.
identification methodology, *Enterobacteriaceae* 732.
identification methodology, *Pseudomonas pseudomallei* 2469.
identification methodology, *Staphylococcus* 759.
identification, *Staphylococcus*, cattle animal isolates 3271.
identification, *Staphylococcus*, methodology 3273.
identification, *Streptococcus*, methodology 3274.
Rapid STREP, identification, *Streptococcus* 3280.
Staphylococcus hyicus, identification 719.
Staphylococcus identification 3308.
- Apiculture,**
Apis mellifera, anesthesia, burning, *Langemannia wahlbergi* 4230.
- Apis,**
vectors, *Erwinia amylovora* fire blight, disease transmission, *Pyrus communis* 5442.
- Apis mellifera,**
anesthesia, burning, *Langemannia wahlbergi*, apiculture 4230.
viruses, antisera production 5891.

- Apium graveolens**,
Fusarium oxysporum f.sp.apii yellows, disease resistance, inheritance 8066.
nitrogen uptake, *Glomus mosseae* 1259.
yellows, non-pathogenic strains, biological control, *Fusarium oxysporum* f.sp.apii 6306.
- Apodemus agrarius**,
cell culture, propagation, epidemic hemorrhagic fever virus 7564.
- Aspotriporin**,
characterization, *Blakeslea trispora* 6064.
- Apple chlorotic leafspot virus**,
infection, Malus, long-term effects 6250.
- Apple mosaic virus**,
detection, Citrus, enzyme-linked immunosorbent assay 6249.
rose mosaic disease, *Rosa corymbifera* 8820.
- Apples**,
calcium, treatment, effects on, *Penicillium expansum*, post-harvest decay 3850.
fruit juices, fruit concentrates, patulin detection, screening methodology, gas chromatography 7096.
incidence, penicillia acid, India 7090.
post-harvest decay, fungi, disease control, dichloronitroaniline, *o*-phenylphenol 8052.
spoilage, *Eurotium amstelodami*, *Saccharomyces rouxii*, water content effects on, mathematical models 8877.
- Aspergillia**,
formation, *Uromyces phaseoli* infection, plants, factors affecting 1964.
penetration, *Erysiphe graminis* f.sp.hordei, powdery mildew, host-pathogen interactions, *Hordeum vulgare* 8788.
penetration, *Pyricularia oryzae*, isoprothiolane inhibition, blast, *Oryza sativa* 2892.
Pyricularia oryzae, penetration, cell walls, tricyclazole inhibition, *Oryza sativa* 2092.
- Apramycin**,
resistance, mechanisms, *Escherichia coli* 5719.
- Aptenodytes patagonicus**,
colonies, nitrogen cycle 9003.
- Aquaculture**,
Brachia, viruses carriage, public health risks, reviews 2386.
Lotula punctatus, *Aeromonas hydrophila* population levels, culture systems 6707.
sea water nitrification, filters, nitrifying bacteria 1668.
use, digestion (anaerobic), industrial wastes, methanogenesis 8404.
wastewater treatment association, *Hyphomicrobium* spp. mixtures, *Aristichthys nobilis*, levels, fecal coliforms, *Streptococcus*, *Salmonella*, viruses 1463.
Aquasplidium magnetotacticum,
nitrogen fixation 3968.
- Aquatic bacteria**,
biodegradation, oil dispersants, sea water 1876.
biomass measuring techniques 8462.
live, detection, fluorescein diacetate, fluorescent probes, fresh water 7534.
- Aquatic commensal bacteria**,
microorganisms, toxicants effects on metabolism, measurements methodology 1535.
- Aquatic environment**,
Epilobium nigrum, *Cladosporium cladosporioides*, biodegradation, *Alnus* leaves 184.
fungicides, antifungal activity screening 2893.
isolation methodology, nitrifying bacteria 6774.
pollutants, toxicity testing, *Clostridium*, *luminous bacteria* 1601.
sediments, bacteria biodegradation monohalogenated biphenyls water pollution 3682.
Vibrio cholerae detection, indirect fluorescent antibody test 9286.
- Aquatic microorganisms**,
amine biodegradation, metabolic pathways 8688.
biodegradation assays, chemical pollution, rivers 2329.
biodegradation, diethyl phthalate 7837.
biodegradation, *o*-phenylphenol, rivers 7836.
exudates, inhibition, biodegradation, xenobiotics, bacteria 8687.
microbial pollution, indicator species, water pollution, reviews, bibliographies 494.
phenols biodegradation, water pollution, pollution effects 5812.
soft rot, biodegradation, wood, reservoirs, sub-polar environments 7838.
- Aquifers**,
creosote contamination, biodegradation, methanogenic bacteria, *Pseudomonas stutzeri* 5815.
ground water, bacteria, community structure, biomass, nutritional status, indigenous species 5817.
ground water, indigenous species, bacteria, actinomycetes, yeasts, vertical distribution 5816.
- Arabinofuranosidase**,
Aspergillus fumigatus, spectrophotometry 837.
enzymatic activity production, *Callinemonas* growth, carbohydrates substrates 32.
extracellular enzymes, characterization, *Erwinia carotovora* 5133.
Pseudomonas spp. heptarichoides, biosynthesis, activity, isolation, characterization 7761.
Ruminococcus albus, purification, physicochemical properties, role, hydrolysis, cell walls 5121.
- 1- β -D-Arabinofuranose thymine**,
resistance, herpes simplex virus 2, herpes simplex virus 1 2192.
- 1- β -D-Arabinofuranosyl-E-5-(2-bromovinyl)uracil**,
drug resistance, varicella-zoster virus, characterization 6403.
- 1- β -D-Arabinofuranosyladenine**,
analogs, antiviral activity, viruses 6478.
derivatives, synthesis, antiviral activity, herpesvirus 5748.
- Arabinosyl hypoxanthine**,
antiviral activity, herpes simplex virus 2 9114.
- Arabis mosaic virus**,
disease transmission, *Xiphinema diversicaudatum*, plants 6272.
pathogenesis, light intensity, *Cucumis sativus* 2009.
- D-Arabinol**,
conversion, *Gluconobacter suboxydans* immobilized cells, D-xylulose production 949.
- Arachis**,
leafspot, *Cercospora arachidicola*, disease resistance 5491.
- Arachis hypogaea**,
aflatoxins levels 7441.
Basidiomycetes plant diseases, pathogenesis 1111.
black rot, *Cylindrocylindrium crotalariae*, crop rotation effects on disease resistance 5490.
black rot, *Cylindrocylindrium crotalariae*, fertilizer applications effects on 8772.
blight, *Sclerotinia minor*, South Africa 5410.
cultivars, germplasm, disease resistance, peanut mottle virus infection 8061.
disease resistance, *Aspergillus flavus* infection, cultivars comparison 7086.
disease resistance, black rot 8105.
disease resistance, *Cylindrocylindrium crotalariae* root rot, plant breeding 1171.
genotypes, comparison, black rot virulence, plant breeding 8084.
leafspot, *Cercospora arachidicola*, *Cercosporidium personatum*, pathogenesis, effects on growth 7945.
leafspot disease control, *Cercospora arachidicola*, *Cercosporidium personatum* 3793.
nodules, *Rhizobium bacteroids*, nitrogenase, acetylene reduction, oxygen effects on 7291.
phytology, mycoplasma-like organisms, leaves lesions, ultrastructure 8773.
phytopathogenic fungi pod rot, calcium levels effects on pathogenesis 1121.
plant diseases, cowpea mild mottle virus, epidemiology 6235.
plant diseases, groundnut rosette virus, detection 4504.
Pseudomonas solanacearum wilt, soil, water availability, effects on pathogenesis 249.
Rhizobium inoculation, field trials 4646.
Rhizobium isolates, growth rate, inhibition, pH, salinity 2170.
Rhizobium, nitrogen fixation, characterization 9019.
root rot, *Cylindrocylindrium crotalariae*, factors affecting, pathogenesis 7942.
root rot, *Pythium myriophyllum*, disease control, gibberellins, foliar application 322.
rust, leaves phenolic acids levels association 8771.
Sclerotium rolfii stem rot, spatial distribution, crop fields, USA, North Carolina 7134.
seed treatments, fungicides 1229.
seeds infection, peanut mottle virus, transmission (seed), enzyme-linked immunosorbent assay screening 8769.
stem rot, *Sclerotium rolfii*, epidemiology, factors affecting 6239.
vascular-arbuscular mycorrhizas, stimulation, growth, nutrient uptake, *Glomus fasciculatum* 5641.
yield, leafspot, *Cercospora arachidicola*, *Cercosporidium personatum*, effects on 7934.
yield reduction, black rot, *Cylindrocylindrium crotalariae*, mathematical models 242.
- cucumber mosaic virus detection, China, People's Rep. 6229.
- Arbutus unedo**,
mycorrhizas, symbiosis, ultrastructure 4622.
- Archeobacteria**,
aphidicolin inhibition DNA biosynthesis 7368.
- Archips podana**,
nontarget organisms, granulosis virus biological control effects on, orchards, *Cydia pomonella* 4387.
- Arctic**,
mycorrhizas, Basidiomycetes, ecological distribution, conferences 2546.
- Areca**,
Rhizosphere microorganisms, vertical distribution 5646.
- Areca catechu**,
nuts, incidence, patulin, India 7087.
pathogenesis, *Phytophthora parasitica* var. *piperina*, oil cake, effects on 8138.
roots, *Ganoderma lucidum* infection, detection methodology, fluorescent antibody test 7160.
- Arnavirus**,
antigens, antibodies, detection, radioimmunoassay, enzyme-linked immunosorbent assay 8455.
antiviral activity, synergism, selenazofurin, tiazofurin, ribavirin 9117.
- Argentine**,
fungi, species composition, soils, *Nothofagus dombergii* forests 3906.
Helianthus annuus seeds, mycoflora, aflatoxins detection 7061.
plants, vesicular-arbuscular mycorrhizas determination, soil types association 3939.
- Arginine**,
genes, role, *Escherichia coli* mutagenicity testing 6775.
radioactive labelling, N.M.R., streptothricin biosynthesis, *Streptomyces* 6569.
- Arginine dihydrolase**,
detection, methodology, bacteria 772.
- Aristichthys nobilis**,
aquaculture association wastewater treatment, levels, fecal coliforms, *Streptococcus*, *Salmonella*, viruses 1463.
- Armilaria leucobulbina**,
dieback, electrical impedance, *Eucalyptus obliqua*, *Eucalyptus globulus* subsp. *biosciata* 2117.
- Armilaria mellea**,
colonization, dieback, association ethanol levels, defoliation, *Quercus velutina*, *Quercus alba* 5586.
disease control, composting, crop residues 2842.
infection, *Pinus sylvestris* roots, fertilizer applications effects on 2923.
infection, relationship growth rings, *Picea abies* 355.
pathogenicity, *Picea abies*, *Fagus sylvatica* 353.
root rot, *Coniferales*, susceptibility, relationship, soil nutrients, soil pH 2919.
roots infection, decline, *Picea rubens* 8948.
- roots, plant diseases, +*Cronartium ribicola* blister rust, association, *Dendroctonus ponderosae*, *Phytophthora* spp., *Pinus monticola*, USA, Idaho 8182.
- Armoracia rusticana**,
Spiroplasma citri brittle root disease, cauliflower mosaic virus, turnip mosaic virus, infection effects on 8020.
- Aroma**,
freezing effects on, *Tricholoma equestre*, *Xerocomus badius* 7856.
sausages, starter cultures, actinomycetes, yeasts 7855.
wine, role, *Botrytis cinerea* esterase activity 4410.
- Aroma compounds**,
champagne, *Saccharomyces* effects on 4417.
identification, gas chromatography, I.R. spectroscopy, champagne, biosynthesis, *Saccharomyces* 7813.

Aromatic compounds, (continued)

- organoleptic evaluation, musts fermentation, wine production, *Schizosaccharomyces* *acidodevoratus* 6933.
- production, dairy starters *Leuconostoc cremoris*, mutagenesis, U.V. radiation, N-nitroso-N-methyl-N-nitrosoguanidine 1906.
- substance microflora, interaction *Penicillium camemberti*, ripening, Camembert cheese 6186.
- Aromatic compounds,**
- adsorption, carbon (activated), biodegradation, wastewater treatment 1475.
- biodegradation, alcohol dehydrogenase (NAD(P)⁺), purification, characterization, *Rhodospseudomonas acidophila* 7692.
- biodegradation, anaerobic bacteria, denaturation pathways 2701.
- biodegradation pathway, characterization, plasmids genetic control, reviews 8279.
- biodegradation, reviews, books 8495.
- carbon sources, soil, role inoculum survival, *Rhizobium leguminosarum* var. *trifolii* 3961.
- digestion (anaerobic), reviews 7830.
- Frankia, effects on actinorhizas 4595.
- ³-halogens, microorganisms biodegradation, mechanisms, reviews 7826.
- hydrocarbons, biodegradation, reviews 8278.
- inhibition methanogenesis, digestion (anaerobic), wastewater treatment 4680.
- Laccaria laccata, ectomycorrhizas, biological control, *Fusarium oxysporum*, root rot, *Pseudotsuga menziesii* 5562.
- nitrogen containing, bacteria, biodegradation 1005.
- oxidation, laccase, *Fusarium* 5977.
- removal, carbon (activated), wastewater treatment 2371.
- removal, carbon (activated) adsorption, biodegradation, water treatment 7502.
- storage cells, leaves, antifungal activity, *Cercospora rodmannii*, *Acremonium zonatum*, role disease resistance, *Elcinchima crassipes* 8813.
- substituted, induction catechol 1,2-dioxygenase, catechol 2,3-dioxygenase, *Nocardia corallina* 912.
- Xenobiotics, industrial wastes, biodegradation, bacteria 8393.
- Aromatic hydrocarbons,**
- biodegradation, metabolism, reviews, microorganisms 8282.
- chlorination, biodegradation, TOL plasmid, *Pseudomonas*, *Pseudomonas cepacia* 5313.
- Aromatic-L-amino acid aminotransferase,**
- characterization, *Candida maltosa* 8582.
- Aromatic-L-amino-acid decarboxylase,**
- cytosolal 5-phosphate requirements, *Micrococcus peritremis* 1817.
- Arphenamine A,**
- synthesis 3175.
- Arpila conspersa,**
- antennopoxvirus infection, use biological control 6905.
- Arsenic,**
- nitrification inhibition, mathematical models 2358.
- oil, shales, microorganisms, role, solubilization 9029.
- oxides, inhibition *Rhizobium leguminosarum* var. *trifolii* nodulation, *Trifolium* 7294.
- removal, sulfur compounds, mixed culture, *Thiobacillus ferrooxidans*, *Thiobacillus thiooxidans* 8261.
- resistance, relationship β -lactamase levels, clinical isolates, *Staphylococcus aureus* 2203.
- Arsenic acid,**
- Medicago sativa treatment, nitrogen fixation, leghemoglobin, nodulation, biomass 2961.
- resistance, R factor R773, homology, R factor R46, *Escherichia coli* 3026.
- resistance, relationship streptothricin, biosynthesis, *Streptomyces noursei* 7470.
- resistant mutant, relationship streptothricin biosynthesis, *Streptomyces noursei* 7470.
- Artemisia herba-alba,**
- culture extracts, antifungal activity, aflatoxins biosynthesis, *Aspergillus flavus* 7697.
- Arthroacter,**
- biodegradation, lignocelluloses, effects on, digestibility, Ruminantia 7882.
- biological control, pitch canker, *Fusarium moniliforme* var. *subglutinans*, *Pinus* 293.
- glucose isomerase, production, characterization 2618.
- hexadecane metabolism, inclusion bodies ultrastructure 5705.
- lysis, *Candida pseudotropicalis*, *Geotrichum candidum*, single-cell protein production 6815.
- neuraminidase, immobilized enzymes, use agarose 2580.
- peanuts lignin biodegradation 177.
- phenol biodegradation, carbon (activated) adsorption, water treatment 7500.
- L-phenylalanine conversion, phenethyl alcohol production, cheese ripening 6993.
- resting cells, glycolipids biosynthesis, structure, surfactants activity 7777.
- use, waste treatment, activated sludge, pentachlorophenol containing synthetic wastes 559.
- Arthrobacter aureus,**
- glycosaminophosphate isomerase (glutamine-forming) activity, anticapsin inactivation 6043.
- Arthrobacter globiformis,**
- immobilized cells, limonin levels, fruit juices, bitterness reduction 5338.
- immobilized cells, steroids conversion 104.
- L-lysine production, hydrocarbons, carbon sources, nutrient requirements 4265.
- xylose isomerase continuous culture, batch culture, production 6870.
- Arthrobacter simplex,**
- immobilized cells, hydrocortisone supersaturation, 3-oxosteroid Δ^1 -dehydrogenase activity 3523.
- Arthrobacter ureafaciens,**
- inulin fructotransferase (depolymerizing) biosynthesis, factor affecting 4340.
- Arthrobotrys,**
- nectarivorous fungi, predator-prey interactions, *Rhabditis*, *Aphelenchus*, Mexico 2126.
- Arthrobotrys irregularis,**
- pest control, soil properties, pesticide residues effects on, *Meloidogyne* 5218.
- Arthrobotrys oligospora,**
- predator-prey interactions, Nematoda, transmission electron microscopy 2125.
- Arthrospores,**
- cephalosporin C production association, *Acremonium chrysogenum* 4829.
- spore germination, germ tubes formation, antifungal activity, *Trichophyton mentagrophytes* 5738.
- Trichophyton mentagrophytes*, imidazoles sensitivity 1340.
- Argomycin,**
- biosynthesis, antitumor activity 960.
- Aryl-furfurane,**
- derivatives, antiviral activity 4764.

- 1-Aryl-2-nitro-propane-1,3-diols,**
- derivatives synthesis, antifungal activity, *Helminthosporium sativum* 3061.
- 3-Aryl-2-nitroprop-2-aryl esters,**
- derivatives synthesis, antifungal activity, *Helminthosporium sativum* 3061.
- 1-Arylaikanols,**
- stereochemistry, *Rhizopus nigricans*, methodology 5249.
- 3-Arylaminoethyl-5-(2,4-dichlorophenyl)-1,3,4-oxadiazole-2-thione,**
- derivatives, antifungal activity, *Curvularia velutiformis*, *Alternaria tenuis* 5521.
- Arylglycerol- β -aryl ethers,**
- biodegradation, pathway, *Phanerochaete chrysosporium* 2712.
- Arylidenepyrivic acid thiazolines,**
- derivatives, antibacterial activity 2215.
- Arylidenepyrivic acid thiosemicarbazones,**
- derivatives, antibacterial activity 2215.
- Arylsulphatase,**
- activity, soil, Cook Is., Tongan Is. 8225.
- surfactants biodegradation 189.
- Aschersonia alexyrodis,**
- biological control, *Dialeurodes citri* 3565.
- biological control, *Trialetrodes vaporariorum* 3568.
- Ascioplas syriaca,**
- hosts, tobacco ringspot virus, tomato ringspot virus 3818.
- Ascocarpe,**
- ethylene production, forests, *Elaphomyces*, Sweden 351.
- harvesting, *Tuber melanosporum* 3834.
- Ascochyta,**
- blight, *Cicer arietinum*, books, conferences 4247.
- blight, *Cicer arietinum*, disease control, fungicides 3883.
- blight, *Cicer arietinum*, Ethiopia 3790.
- blight, *Cicer arietinum*, India 3792.
- blight, *Cicer arietinum*, reviews 3785.
- blight, *Cicer arietinum*, Spain 3791.
- Ascochyta fabae,**
- seed-borne diseases, *Vicia faba* 7136.
- Ascochyta pini,**
- infection, phytotoxins isolation, *Pinus sativum* 2781.
- Ascochyta pinodella,**
- blight, disease resistance, inheritance, plant breeding, *Pinus sativum* 5477.
- Ascochyta rabeli,**
- blight, *Cicer arietinum*, disease control, seed-borne diseases, reviews 3905.
- blight, *Cicer arietinum*, epidemiology 3786.
- blight, *Cicer arietinum*, Pakistan, reviews 3789.
- blight, *Cicer arietinum*, pathogenicity, races 3788.
- blight, *Cicer arietinum*, screening projects 3787.
- blight, *Cicer arietinum*, susceptibility, factors affecting 1974.
- blight, disease resistance, germplasm screening, plant breeding, *Cicer arietinum* 8093.
- blight, disease resistance, plant breeding, *Cicer arietinum* 3864.
- blight, disease resistance screening projects, *Cicer arietinum* 3863.
- blight, plant breeding, disease resistance, *Cicer arietinum* 3865.
- Ascomycetes,**
- effects on *Basidiomycetes* biodegradation coconuts fibers 1031.
- fungal flora, *Fagus sylvatica*, association, natural pruning 2105.
- lignin biodegradation, reviews 7829.
- Ascospores,**
- Didymella bryoniae*, incidence, *Cucumis sativus*, fruit rot, stem rot 278.
- fungi, seasonal variations, soil horizons, forest floor 5540.
- Venturia inaequalis*, air spora, samplers, epidemiology 804.
- Asepsis,**
- culture, ectomycorrhizas 5542.
- dentistry, environmental hygiene 1519.
- fermenters 3667.
- laminar air flow, nosocomial environments, leukemia, man 572.
- plant cells culture systems, symbiosis, vesicular-arbuscular mycorrhizas 2120.
- Ash,**
- industrial wastes, land disposal, nutrient availability, biodegradation, soil microorganisms 8257.
- pollution effects, carbon dioxide production, soil microorganisms 3951.
- stabilization, soil properties, straw decomposition, acetic acid, acid production, soil microorganisms 7300.
- Asis,**
- Cajanus cajan diseases, crop production, economic importance 7139.
- Asperaginase,**
- detection, electrodes, immobilized cells, *Serratia marcescens* 6777.
- Escherichia coli*, immobilized enzymes, blood immobilization, bioreactors 2575.
- N-terminus, amino acid sequence, amino acid composition, *Escherichia coli* 4322.
- Asperaginopine,**
- isolation, crown gall tumors, *Agrobacterium tumefaciens* 2810.
- Asparagus officinalis,**
- allelopathy, soil microorganisms, *Fusarium* 3831.
- endomycorrhizas effects on growth, association, clays media 2136.
- spot, pathogenesis, *Stemphylium vesicarium* 8845.
- Aspartate aminotransferase,**
- amino acid sequence, *Escherichia coli*, comparison, pigs 6843.
- gostatin inhibition, *Streptomyces samanensis* 1724.
- Aspartate ammonio-lyase,**
- activation activation, *Escherichia coli* 1788.
- ammonium fumarate conversion, L-alanine, immobilized cells, *Escherichia coli*, *Pseudomonas dacunhae* 7.
- organic compounds synthesis 4385.
- Aspartate carbamoyltransferase,**
- spectrophotometry assays 937.
- Aspartate kinase,**
- defective mutant, *Streptomyces clavuligerus*, diaminoimelic acid contents, antibiotics biosynthesis 2257.
- Aspartate 4-decarboxylase,**
- activity, L-alanine biosynthesis, *Pseudomonas dacunhae*, polyurethane immobilization 8525.
- ammonium fumarate conversion, L-alanine, immobilized cells, *Escherichia coli*, *Pseudomonas dacunhae* 7.
- Aspic acid,**
- hydrazides, inhibition, growth, *Pseudomonas pseudomallei*, *Salmonella typhimurium*

Subject Index

Aspartic acid, (continued)

- 8302
inhibition pyruvate carboxylase, yeasts 889.
production, deficient mutant, pyruvate kinase, *Brevibacterium flavum* 7661.
stimulation, colistin production, *Bacillus polymyxa* 3148.
- oxidation, racemization, β -lactam antibiotics synthesis 9205.
- Aspartic proteinase,**
isoenzymes, purification, characterization, cellulase hydrolysis, *Trichoderma reesei* 87.
- Aspartyl-tRNA synthetase,**
glucose, glucose-6-phosphate residues identification, *Saccharomyces cerevisiae* 907.
purification, physicochemical properties, *Saccharomyces cerevisiae* 1765.
- Aspergillic acid,**
biosynthesis, antibiotics, mixed culture, *Aspergillus flavus*, *Aspergillus nidulans* 4063.
- Aspergillomarinine A,**
inhibition peptidyl dipeptidase A, carboxypeptidase A, aminopeptidase (microsomal) activity, *Aspergillus oryzae* 3734.
- Aspergillomarinine B,**
inhibition peptidyl dipeptidase A, aminopeptidase (microsomal) activity, *Aspergillus oryzae* 3734.
- Aspergillus,**
acid phosphatase, alkaline phosphatase, inhibitors production 917.
afatoxin Q1, metabolism, liver, rats 223.
afatoxins biosynthesis, elements nutrient requirements 7068.
afatoxins biosynthesis in vitro, isolation, man food, animals feeds, Egypt 7062.
afatoxins biosynthesis, light, oxygen, sodium chloride, effects on 7071.
afatoxins biosynthesis, mycelia growth, nutrient sources 7074.
afatoxins, detection methodology 8725.
afatoxins, separation techniques, use, column chromatography 5374.
allergens extracts, contamination, afatoxin B1 8722.
antifungal activity, amphotericin B+antifungal agents+rifampicin 5785.
antifungal activity, mangostin, derivatives, isolation, *Garcinia mangostana* 4783.
antifungal activity, rifamycin 8363.
biodegradation, leather, museums, Kuwait 1024.
biodegradation, postal stamps paper 3649.
biodegradation, wool, control, biocides 1288.
cell culture preservation 5087.
cellulolytic enzymes activity 6871.
corks contamination, off flavor, wine 1870.
 α -cyclopiazonic acid production 5370.
detection, oxidase extracellular enzymes 1799.
endo-D-galacturanase immobilized enzymes, kinetics 15.
exo-1,4- α -D-glucosidase, starch hydrolysis inhibitors, glycoproteins, purification, characterization 3500.
 β -D-glucosidase, *Solanum laciniatum* glycoalkaloids hydrolysis 1006.
growth, aflatoxins biosynthesis, casein, substrates, isolation, milk, cattle, buffaloes 7078.
growth, contamination, taints production, corks, wine 7798.
hydrolysis, glycoalkaloids, *Solanum laciniatum* 6155.
lignin biodegradation 7819.
mycotoxins, detection, media (culture) 5368.
mycotoxins, food contamination, man, books 6798.
mycotoxins, levels, Roquefort cheese, Egypt 7058.
patulin, incidence, Arecia catechu nuts, India 7087.
polygalacturonase, pectinolytic enzymes, production, use pulp, Agave fourcroydes 5189.
single-cell protein production, fermentation, starch residues, food industry 1713.
- Aspergillus aculeatus,**
fruit rot, post-harvest decay, oranges, cellulase association 2049.
fruit rot, *Ritis vinifera* 8843.
- Aspergillus alleluiae,**
pectinase, biodegradation, *Daucus carota* 8538.
- Aspergillus alliaceus,**
pectinolytic enzymes production, liquid culture, inoculum levels effects on 4352.
polygalacturonase biosynthesis 6038.
- Aspergillus awamori,**
albumin hydrolysis 6016.
+ Azotobacter, phosphate-dissolving bacteria, inoculation, composting 8391.
composts, phosphatase activity 7491.
corn fermentation, ethanol production 5290.
exo-1,4- α -D-glucosidase, genes, cloning 3498.
pectinolytic enzymes production, factors affecting 8606.
proteinase, immobilized enzymes, albumin hydrolysis 4341.
soil, solubilization, phosphate 6350.
- Aspergillus candidus,**
antifungal FR-900318 biosynthesis, characterization 3103.
antifungal activity, cyclosporin A 8312.
- Aspergillus flavipes,**
growth, heterotrophy, acid rain effects on, soil 2940.
- Aspergillus flavus,**
afatoxin B1 biosynthesis, antimicrobial agents, preservatives, effects on, in vitro 7095.
afatoxin B1, biosynthesis, sorbic acid, stimulation 2761.
afatoxin B1, effects on proteolytic enzymes, lactic acid bacteria, cheese production 8730.
afatoxin B1, grain contamination, *Oryza sativa* 8733.
afatoxins biosynthesis, antifungal activity, plant extracts, medicinal plants 7897.
afatoxins biosynthesis, factors affecting 7091.
afatoxins biosynthesis, light, oxygen, sodium chloride, effects on 7071.
afatoxins biosynthesis, lipid peroxidation 1077.
afatoxins biosynthesis, m-bisulfite effects on 7076.
afatoxins biosynthesis, *Nicotiana tabacum* leaves, storage conditions effects on 7092.
afatoxins biosynthesis, rice, cheddar cheese, temperature effects on 3703.
afatoxins contamination, Zea mays genotypes, disease resistance 8880.
afatoxins, detection, peanuts 1078.
afatoxins detoxification 1081.
afatoxins, dietary intake effects on, energy utilization, proteins utilization, ducks 3721.
afatoxins, food contamination, corn, control, reviews 222.
afatoxins, food contamination, effects on proteins nutritive value, chickens

Aspergillus flavus, (continued)

- 5352
afatoxins, levels, food contamination, *Prunus amygdalis*, nuts 7101.
afatoxins levels, Zea mays 6204.
afatoxins production, factors affecting, reviews 7052.
afatoxins production, meals, soybeans, cottonseed 3746.
afatoxins, separation techniques, use, column chromatography 5374.
antifungal activity, amphotericin B+antifungal agents+rifampicin 5785.
Aspergillus nidulans, mixed culture, aspergillic acid biosynthesis, antibiotics 4063.
association, *Aspergillus niger*, aflatoxins, production, corn, factors affecting, inhibition 2756.
clinical isolates,
1-(4-chlorophenoxy)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,
1-(4-chlorophenoxy)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,
antifungal activity 4756.
extracts, biological control, *Phytophthora parasitica* var. *pariperna* rot, *Piper betle* 5518.
fluorescence, fungi, agriculture, aflatoxins, Zea mays, *Gossypium hirsutum* 4474.
growth, aflatoxins production, amino acids effects on 215.
growth, antifungal agents effects on 4019.
growth, Zea mays hybrids seeds 8083.
infection, disease resistance, *Arachis hypogaea*, cultivars comparison 7086.
infection, *Solanaceae*, oxalic acid levels 6281.
itraconazole antifungal activity, new records 9104.
mycoflora, Vicia faba flowers, contamination, beans, Egypt 7085.
nitroquinoline, acriflavine, thiatylamine, induction mutation, characterization, effects on aflatoxins biosynthesis 7084.
pathogenesis, Zea mays, scanning electron microscopy 6245.
proteinase, α -amylase, activity, association, hydrocarbons carbon sources comparison 2189.
sclerotia formation, ear rot, Zea mays 8784.
spore germination, lectins effects on 3877.
- Aspergillus foetidus,**
 α -amylase, production, purification, characterization 6012.
- Aspergillus fumigatus,**
air spora recovery, sewage sludge composting 3213.
antibiotics production, morphology association 2255.
antibodies detection, serological tests 5930.
antibody response, measuring techniques, enzyme-linked immunosorbent-assay, diffusion tests 2533.
antifungal activity, amphotericin B+antifungal agents+rifampicin 5785.
 α -L-arabinofuranosidase, spectrophotometry 837.
biodegradation, *Saccharum officinale* bagasse, enzymes, role 186.
biodegradation, feeds, domestic animals 1025.
cellulase, endo-1,3- β -D-xylanase, production 1807.
cellulase, proteins, production, growth conditions, effects on 6015.
clinical isolates,
1-(4-chlorophenoxy)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,
1-(4-chlorophenoxy)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,
antifungal activity 4756.
disinfectants antifungal activity, solutions, contact lenses 5870.
drug sensitivity testing, antifungal agents 8308.
mycotoxins, food contamination, Zea mays, intoxication, cattle 6205.
single-cell protein production, fermenters, cassava roots 1709.
spores, antifungal activity, iron(II), hydrogen peroxide, iodide 4014.
U.V. radiation mutants, cellulose biodegradation 2707.
- Aspergillus glaucus,**
incidence, grain, storage conditions, USA 8056.
- Aspergillus kanagawaensis,**
proteolytic enzymes, extracellular enzymes, hydroxyanthraquinone stimulation 918.
- Aspergillus minutus,**
soil isolates, cyanuric acid, biodegradation 1894.
- Aspergillus nidulans,**
Aspergillus flavus, mixed culture, aspergillic acid biosynthesis, antibiotics 4063.
lipids production, whey, nutrient sources 7788.
protoplast fusion, *Aspergillus rugulosus*, penicillin biosynthesis, genes, linkage analysis 4047.
radioactive labelling, carbon-14, liquids scintillation 5933.
resistance, antifungal activity, dicarboximides 8296.
spore germination, antifungal activity, IBP, dicloran 1222.
- Aspergillus niger,**
aflatoxins detoxification 1081.
amylase, 1,6-glucosidase recovery, fermentation, wheat 204.
antifungal activity, amphotericin B+antifungal agents+rifampicin 5785.
antifungal activity, rhodamine derivatives 4018.
antimicrobial activity, nematocides 1325.
association, *Aspergillus flavus*, aflatoxins, production, corn, factors affecting, inhibition 2756.
biodegradation, olives food processing wastes, proteins production 871.
biodegradation, copper naphthenate, characterization 1038.
cellulase biosynthesis 2581.
cellulase physicochemical properties 2592.
cellulase samples, containing activity, carboxymethylcellulase,
endo-1,3- β -D-xylanase 8533.
chlorobenzoates biodegradation 6170.
citric acid production, U.V. radiation mutagenesis 1731.
citric acid production, liquid culture 6814.
clinical isolates,
1-(4-chlorophenoxy)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,
1-(4-chlorophenoxy)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,
antifungal activity 4756.
corn fermentation, ethanol production 5290.
drug sensitivity testing methodology 5738.
esterase multiple forms, purification, characterization 1784.
esterase multiple forms, thermal stability, substrate specificity 1786.
ethyl 3-exobutanoate, 1-(1,3-dithian-2-yl)-2-oxopropane, reduction, formation,
3-hydroxybutanoate, 1-(1,3-dithian-2-yl)-2-hydroxypropane 8631.
exo-1,4- α -D-glucosidase amino acid sequence 5980.
exo-1,4- α -D-glucosidase, amino acid sequence 7724.
exo-1,4- α -D-glucosidase, hydrolysis, maltose, isomaltose, maltotriose 3473.
exo-1,4- α -D-glucosidase, immobilized enzymes, kinetics, stability 78.
exo-1,4- α -D-glucosidase immobilized enzymes, kinetics, stability 78.
exo-1,4- α -D-glucosidase, immobilized enzymes, starch processing 111.
exo-1,4- α -D-glucosidase, kinetics, glucose conversion, formation, maltose,

- Aspergillus niger**, (continued)
isomaltose 3464.
exo-1,4- α -D-glucosidase production, catabolite repression, mutants selection 5118.
exo-1,4- α -D-glucosidase, purification, kinetics 934.
exo-1,4- α -D-glucosidase, hyptophan residues, role activity 7726.
exo-1,4- β -D-xylosidase activity, substrate specificity, monosaccharides, pH, temperature effects on 7725.
exo-1,4- β -D-xylosidase, characterization 4320.
exo-1,4- β -D-xylosidase, glycosylation, p-nitrophenyl- β -D-glucopyranoside, p-nitrophenyl- β -D-xylopyranoside 4349.
exo-1,4- β -D-xylosidase, hydrolysis, glycosylation 7752.
exo-1,4- β -D-xylosidase, purification, characterization 6857.
extracts, biological control, *Phytophthora parasitica* var. *piperina* rot, *Piper betle* 5518.
fermentation, citric acid production 6813.
fermentation, inulinase production, optimization 5179.
fermentation, tubers extracts, saponins purification, *Ficaria ranunculoides* 5222.
 β -D-galactosidase, immobilized enzymes 69.
 β -D-galactosidase, immobilized enzymes, fluidized beds 82.
 β -D-galactosidase, immobilized enzymes, membranes, bioreactors 83.
 β -D-galactosidase, lactose hydrolysis, use bioreactors 4314.
glucose oxidase, immobilized enzymes, activity, stability 1770.
glucose oxidase, immobilized enzymes, bioreactors optimization 7735.
glucose oxidase, xanthine oxidase, association, *Caldanomyces fumago*, chloride peroxidase, use, bioelectrochemical cell, chemicals synthesis 6076.
 β -D-glucosidase, immobilized enzymes, characterization 3491.
glutamine synthetase, purification, characterization 8597.
growth, heterotrophy, acid rain effects on, soil 2940.
immobilized cells, use production industries chemicals 6836.
immobilized enzymes, glucose oxidase, *Aspergillus niger* cattle liver catalase, glucose oxidation 2578.
infection, *Solanaceae*, oxalic acid levels 6281.
inulinase, biosynthesis, characterization 6039.
molasses fermentation, nutrient requirements, citric acid production 8514.
morphology, resins effects on, use, biomass measuring techniques 1677.
mutants, citric acid production, liquid culture 1708.
mycelia, immobilization, glucose oxidase, catalase 1739.
mycelia, immobilized enzymes methodology, characterization, fermentation applications 4408.
naphtho-pyrene biosynthesis, cottonseed contamination isolates 6105.
pectinolytic enzymes production, agricultural wastes 8605.
pectinolytic enzymes production, continuous culture 8601.
polygalacturonase, isolation methodology 3480.
polygalacturonase, pectinolytic enzymes, production, use pulp, *Agave fourcroydes* 5189.
polygalacturonase, purification, extracellular enzymes 926.
soil, heterotrophy, acid rain anions effects on 2939.
Thiophene derivatives antifungal activity, photolinduction 3060.
use retting, fibers, *Cocos nucifera* 7792.
wastewater treatment, rotating discs, industrial effluents 2341.
- Aspergillus oryzae**,
barley contamination, ochratoxin A production 5375.
cell culture, microsomes, hydroxylase purification, characterization 5124.
glutamate dehydrogenase, immobilized enzymes, characterization 92.
ochratoxin A biosynthesis, biomass, growth, temperature effects on 2758.
spores, immobilized cells, progesterone hydroxylation 6048.
- Aspergillus oryzae**,
aminopeptidase, purification, methodology 5136.
 α -amylase, assays, use starch degradation products 7677.
aspergillomerase A, aspergillomerase B inhibition peptidyl dipeptidase A, carboxypeptidase A, aminopeptidase (microsomal) activity 3734.
asprochlorin constituents, structure, oryzachlorin 3150.
biodegradation, olives food processing wastes, proteins production 871.
biosynthesis preparations efficacy, minor biosynthesis, alcohol concentration relationship 992.
exo-1,4- α -D-glucosidase, α -amylase, production, optimization, carbohydrates hydrolysis 5193.
exo-1,4- α -D-glucosidase biosynthesis, carbon sources, nitrogen sources 4332.
 β -D-galactosidase, immobilized enzymes, lactose hydrolysis, skim milk, whey 206.
 β -D-galactosidase, immobilized enzymes, stability, kinetics 80.
 β -D-glucosidase kinetics, substrates affinity 1787.
koji, glutaminase, aminopeptidase (cytosol), assays, use L-glutamate oxidase 7853.
metalloproteinase, purification, characterization 8578.
monophenol monooxygenase isoenzymes activation, pH role 6041.
pectinesterase, pectinase, purification, characterization 6862.
protoplast fusion, soy sauce production 4451.
soy sauce production, role, α -amylase, proteinase 3697.
- Aspergillus parasiticus**,
aflatoxin B1 production, antifungal agents effects on 3745.
aflatoxins, acetic acid incorporation, association antifungal agents 217.
aflatoxins, biosynthesis, association, nitrate, repression, averufin 220.
aflatoxins, biosynthesis, caffeine inhibition 7040.
aflatoxins biosynthesis, carulenin, tetrahydrocarulenin, effects on 1075.
aflatoxins biosynthesis, factors affecting 7091.
aflatoxins biosynthesis, factors affecting, in vitro 7067.
aflatoxins biosynthesis, glucose effects on carbohydrates catabolism 8723.
aflatoxins biosynthesis, herbal medicines effects on 5377.
aflatoxins biosynthesis inhibition, caffeine role 218.
aflatoxins biosynthesis, light, oxygen, sodium chloride, effects on 7071.
aflatoxins biosynthesis, rice, cheddar cheese, temperature effects on 3703.
aflatoxins biosynthesis, seeds oils effects on 3747.
aflatoxins, food contamination, *Zea mays*, Phaseolus, detection, use, chromatography methodology 7088.
aflatoxins, separation techniques, use, column chromatography 5374.
cell free system, aflatoxin B1 biosynthesis, sterigmatocystin conversion 2760.
growth, aflatoxins production, amino acids effects on 215.
growth, aflatoxins production, antifungal activity, essential oils, spices 7891.
growth, antifungal agents effects on 4019.
infection, aflatoxins production, *Vigna unguiculata*, Tanzania 3795.
spores injuries, growth, aflatoxins biosynthesis, sorbic acid, propionic acid, effects on 7042.
versicolourins production, zinc effects on 7887.
- Aspergillus phoenicis**,
 β -D-glucosidase production 3445.
3 α -hydroxysteroid dehydrogenase, immobilized enzymes, androstane diene synthesis 106.
- Aspergillus restrictus**,
enzymes, production, association, water activity, detection, seeds, contamination 1166.
- Aspergillus rugosulus**,
protoplast fusion, *Aspergillus nidulans*, penicillin biosynthesis, genes, linkage analysis 4047.
- Aspergillus saitoi**,
exo-1,4- α -D-glucosidase subunits, binding specificity 8663.
ribonuclease T2, purification, characterization 884.
- Aspergillus tamaritii**,
biodegradation, wood, fungicides, prophylaxis 1252.
cyclopiazonic acid, production 221.
ergot, alkaloids, biosynthesis, characterization 5254.
 α -D-galactosidase, endo-1,4- β -D-mannanase, purification, characterization 5984.
 α -D-galactosidase, purification, molecular weight, characterization 5988.
infection, *Solanaceae*, oxalic acid levels 6281.
- Aspergillus terreus**,
biosynthesis, structure, growth regulators, plants 2668.
cellulase complexes fractionation 4309.
citrinin biosynthesis, N.M.R., structure 6570.
immobilized cells, lactic acid production 862.
terreycyclic acid A biosynthesis 7475.
terreycyclol, structure, antimicrobial activity 5802.
territrim C characterization 1928.
- Aspergillus terreus var. aureus**,
metabolites, structure, antimicrobial activity 4797.
- Aspergillus ustus**,
austocystin D biosynthesis, N.M.R. 5378.
cyclopiazonic acid, isolation, N.M.R., characterization 6803.
- Aspergillus varicolor**,
biological control, *Alternaria alternata* leaf blotch, *Hordeum vulgare* 2083.
- Aspergillus versicolor**,
averufin, mitochondria oxidative phosphorylation uncouplers 4472.
ferrirocin, iron(III) binding, purification, characterization 8521.
post-harvest decay, distribution, mycelia, sterigmatocystin, *Oryza sativa* 8875.
- Aspergillus wentii**,
mixed culture, *Trichoderma reesei*, media (culture) association production, cellulase, hemicellulase 1736.
proteolytic enzymes, extracellular enzymes, hydroxyanthraquinone stimulation 916.
- Asphall**,
biodegradation, bacteria, metabolism 1304.
- Aspidomonas excalum**,
alkaloids, antibacterial activity 5730.
- Aspirin**,
effects on tobacco mosaic virus multiplication, spreading, *Nicotiana tabacum* cultivars 1141.
- Asprochlorine**,
constituents, oryzachlorin structure, *Aspergillus oryzae* 3150.
- Asplenium filare**,
rhizosphere microorganisms, phyllosphere microorganisms, fungi 8961.
- Asplenium nidus**,
leaf spot, leaf blight, etiology, *Pseudomonas gladioli* 4563.
- Assays**,
aflatoxin B1, food contamination, high-performance liquid chromatography 7044.
aspartate carbamoyltransferase, spectrophotometry 937.
bacteria siderophores, colorimetry, methodology, in vitro 661.
biochemical characteristics, bacteria, water isolates, food, isolates, identification 2499.
biodegradation, methodology comparison, reviews 7822.
biomass suspended matter, carbon (activated) sewage sludge waste treatment 2379.
bovine diarrhoea-mucosal disease virus, use, poly(I-C) 5890.
2,4-dinitrosalicylic acid, sugars, lignocelluloses hydrolysis 8680.
 β -D-glucuronidase, gas chromatography, *Escherichia coli* 3762.
glycolic acid, methodology, use, bacteria acyl type cell walls identification 3299.
Heterobasidium anomum, roots, media (selective) 2111.
influenza virus antibodies, complement fixation 3235.
 β -lactamase detection, clinical isolates, gram-negative bacteria, gram-positive bacteria 6884.
Methanobacterium thermoautotrophicum coenzyme F420, association, photobleaching, fluorescence decay 6819.
methodology, antibiotics, antimicrobial agents 9173.
mycotoxins contamination, man, reviews 7045.
oxygen uptake, use, processes control, activated sludge, wastewater treatment 3193.
peptidoglycan endopeptidase, biosynthesis, peptidoglycans, *Escherichia coli* 3538.
serum levels, gentamicin, tobramycin, man 3106.
tobramycin, comparison 525.
viruses cells transformation, use, tetrazolium blue staining 9275.
- Astaxanthin**,
extraction, autolysis, *Phaffia rhodozyma* 5225.
extraction, food processing wastes, silage, *Procambarus clarkii* 2714.
extraction, relationship, *Bacillus circulans*+*Phaffia rhodozyma* mixed culture, lytic enzymes activity, carbon sources 1743.
- Asteraceae**,
ectomycorrhizas, vesicular-arbuscular mycorrhizas, symbiosis, detection, Australia 2132.
- Atlantic Ocean**,
sewage sludge disposal sites, viruses survival 9242.
- Atmospheric conditions**,
Campylobacter fetus subsp. jejuni isolation, methodology comparison 1650.
effects on *Claviceps microspora* ergotism incidence, *Pennisetum typhoides* 5427.
effects on sclerotia germination, *Sclerotium rolfsii* 6338.
Streptococcus group A isolation 1666.
- Atmospheric pressure**,
aeration, fermenters, continuous culture, *Candida utilis* 5924.
oxygen, effects on, *Mallotus japonicus*, *Ilex pedunculosa*, bark, nitrogen-fixing bacteria activity 8148.
- ATP**,
alkanol monooxygenase (FMN-linked) bioassays, antibacterial activity, methicillin, *Staphylococcus aureus* 4069.

ATP, (continued)

- assays, counting methods, dairy starters, milk, yogurt 6996.
binding, nitrogenase, *Azotobacter vinelandii* 2608.
bioassays, *Mycobacterium leprae* viability, leprosy, man 7584.
bioluminescence, detection bacteria growth, blood culture 751.
biomass, microorganisms, biodegradation, dissolved oxygen, organic matter, biochemical oxygen demand, waste water, rivers 1454.
Clostridium sporogenes, biosynthesis, enolic acid reduction 1842.
gramicidin S affinity, *Bacillus brevis* 1409.
levels, bioassays, immobilized enzymes, bacterial luciferase 8564.
levels, cellulase biosynthesis, *Trichoderma reesei* 3506.
levels, cellulase production, *Trichoderma reesei* 4334.
levels, relationship streptothricin biosynthesis, *Streptomyces noursei* 7470.
levels, soil, relationship, soil properties, measuring techniques 2147.
measurements, activated sludge biomass, wastewater treatment 6696.
measurements, bacteria enumeration methodology, meat contamination 3304.
monitoring, aerobic bacteria, activated sludge, wastewater treatment, characterization 8409.
protons stoichiometry, N.M.R., membrane potential, adenosinetriphosphatase, mutants, *Escherichia coli* 8531.
recycling, NADP production, immobilized enzymes, acetate kinase, NAD⁺ kinase 143.
regeneration, bioreactors, *Saccharomyces cerevisiae* 169.
role, isocitrate dehydrogenase kinase, isocitrate dehydrogenase phosphatase activity, relationship, isocitrate dehydrogenase regulation, *Escherichia coli* 7711.
soil microorganisms, levels, soil, measuring techniques 1263.
soil microorganisms, soil, measuring techniques 2932.
succinyl-CoA synthetase (ADP-forming) binding sites, 5-p-fluorosulfonylbenzoyl adenosine chemical modification, *Escherichia coli* 1758.
- Aturanine**, antimicrobial activity 4781.
- Atrazine**, identification inhibitors, denitrifying bacteria, soil 9002.
inhibition nitrification, biodegradation, soil microorganisms 3969.
toxicity, permethrin synergism, nontarget organisms, *Pythium ultimum*, *Trichoderma viride* 459.
- Atreplex confertifolia**, interspecific relationships, vesicular-arbuscular mycorrhizas 382.
- Atreplex gardneri**, roots colonization, vesicular-arbuscular mycorrhizas, seasonal variations, environmental factors, deserts, vesicular-arbuscular mycorrhizas 385.
- Auchenorrhyncha**, disease transmission, maize streak virus, Zea mays 7154.
- Augmentin**, amoxicillin+clavulanic acid, β -lactamase inhibitors, antibacterial activity, clinical isolates, gram-negative bacteria, gram-positive bacteria 7438.
antibacterial activity, clinical trials, new records 5791.
antibiotic sensitivity testing, *Branhamella catarrhalis* 9163.
- Aulacothum circumflexum**, vectors, subterranean clover red leaf virus disease transmission 4503.
- Aulacothum solani**, plants, hybridization analysis, detection, subterranean clover red leaf virus, methodology 4151.
- Aulographa eucalypti**, leafspot, *Eucalyptus* 5612.
- Auramycinone**, conversion, *Streptomyces coeruleorubidus*, biosynthesis, 11-hydroxyauramycinone, 9-methyl-10-hydroxydaunomycin 955.
- Aureobasidium**, biodegradation, forest products, colonization, succession, preservatives, effects on 1241.
cellulase 86.
- Aureobasidium pullulans**, antagonism, *Alternaria solani*, use biological control, *Lycopersicon esculentum* 2080.
biodegradation, polyvinyl chloride, films 1032.
biodegradation, wood, control, biocides 1288.
exo-1,4- α -D-glucosidase biosynthesis 8603.
pullulan biosynthesis optimization, peat hydrolysates media 6055.
- Aureofungin**, control, *Botrydiploia theobromae*, fruit rot, *Citrus reticulata* 5525.
fungi, fermentation, high-pressure liquid chromatography, antifungal activity 5800.
- Aureomycin**, production, growth rate, sugar, carbon sources effects on anhydrotetracycline oxygenase, *Streptomyces aureofaciens* 4860.
- Auricularia**, fruit bodies production, inoculation, wood 7846.
- Aurumomycin**, structure, X-ray diffraction, *Streptomyces macromomyceticus* 6558.
- Aurocyrtin D**, *Aspergillus ustus*, biosynthesis, N.M.R. 5378.
- Australia**, *Aeromonas hydrophila*, drinking water contamination, seasonal variations, clinical isolates correlation 8414.
Alternaria alternata infection, Anigozanthus 2020.
Asteraceae, ectomycorrhizas, vesicular-arbuscular mycorrhizas, symbiosis, detection 2132.
Bremia lactucae downy mildew, *Lactuca sativa*, virulence, geographical distribution 3835.
Cassia pleurocarpa, *Cassia* yellow blotch virus isolation, characterization, new records 3800.
Castanea sativa, *Phytophthora* disease control, root rot, crown rot 3876.
drinking water contamination, *Aeromonas*, isolation 8412.
Fusarium tabacinum, host range, pathogenicity, plant diseases 7126.
glycine mottle virus new records, host range, spatial distribution, classification, *Glycine tomentella* isolates 5404.
Helianthus annuus, rust, *Puccinia helianthi* 8014.
Medicago sativa, leafspot, *Stemphylium* 5435.
Phomopsis leptostromiformis infection, *Lupinus*, epidemiology 7926.
plant diseases, bacteria 3769.
Puccinia horiana, white rust, *Chrysanthemum*, epidemiology 2024.
Rubus ulmifolius, rust, *Phragmidium violaceum* 8012.
Salmonella incidence, poultry processing 6194.
soil, actinomycetes, population levels, ecological distribution, environmental

Australia, (continued)

- factors 8991.
swimming pools, chlorination, association, bacteria, levels 3220.
virus-like particles infection, Gramineae 1988.
- Autobac test**, antibiotic sensitivity testing, bacteria, blood culture 494.
urine screening projects, bacteriuria 6784.
use, bacteria identification methodology 788.
- Autoclaves**, association, organic acids production, agar, effects on, mycorrhizas spore germination 5934.
spores sterilization 7396.
sterilization, degradation, glucose ammonium tartrate, media (culture), liquid culture 8490.
- Autolysis**, astaxanthin extraction, *Phaffia rhodozyma* 5225.
Streptococcus group N, dairy starters, media (culture) carbon sources effects on 2733.
- Automated methods**, antibiotic sensitivity testing 2251.
antibiotic sensitivity testing 7404.
antibiotic sensitivity testing, bacteria 3258.
antibiotic sensitivity testing, characterization 481.
antibiotic sensitivity testing, gram-negative bacilli 486.
Automicrobic test, Enteric-Tek system, identification, Enterobacteriaceae 713.
bacteriuria detection, urine 726.
bacteriuria detection, urine screening 3338.
comparison, measuring techniques, antibiotic sensitivity testing, Enterobacteriaceae, *Pseudomonas aeruginosa* 3081.
identification, gram-negative bacilli, biochemical characteristics 706.
media (culture), biochemical analysis, monitoring, fermentation 6142.
monitoring, computer applications, fermentation 6116.
monitoring, fermenters, penicillin fermentation, *Penicillium chrysogenum* 4833.
monitoring, molds, biodegradation 5951.
monitoring, oxygen consumption, biochemical oxygen demand, activated sludge 6688.
Salmonella, serotyping 2506.
urine screening, bacteriuria 7577.
urine screening, bacteriuria, clinical microbiology 690.
use, dilution tests measuring techniques 3049.
- Automicrobic test**, antibiotic sensitivity testing, gentamicin, tobramycin, amikacin, *Pseudomonas aeruginosa* 5778.
antibiotic sensitivity testing, gram-negative bacteria, clinical isolates, methodology, comparison 7419.
identification, Enterobacteriaceae 705.
identification, Enterobacteriaceae 713.
identification, Enterobacteriaceae, computer applications 1645.
identification, gram-negative bacilli 706.
identification, *Staphylococcus* 771.
identification, yeasts, methodology 1682.
methicillin resistance, *Staphylococcus aureus* 4714.
Staphylococcus identification 3308.
use, detection, antibiotic resistance, *Staphylococcus*, oxacillin, methicillin 2207.
- Autopsy**, plastic films, man, disease control 2421.
- Autorediography**, immunodiagnosis, Epstein-Barr virus, immunoglobulin A antibodies, nasopharynx carcinoma, man 4992.
phospholipids biosynthesis, enzymatic activity detection, *Saccharomyces cerevisiae* 3364.
screening, chemotautrophy, hydrogen bacteria 3261.
silver bioaccumulation, conidia, *Botrytis cinerea* 8484.
- AutoSCAN-3**, use, measuring techniques, dilution tests 3049.
- Autotrophy**, *Rhizobium* growth, hydrogenase isolation, characterization 3461.
- Auxin**, +ectomycorrhizas, effects on roots formation, propagation, *Pinus pinaster* 5929.
- Auxotrophs**, amino acids, *Saccharomyces cerevisiae*, phenethyl alcohol sensitivity 3062.
Cochliobolus heterostrophus, population studies, leaf blight, Zea mays 1981.
mutants, isolation, role clavulanic acid, *Bacillus licheniformis* 7611.
Mycobacterium smegmatis, isolation, use vancomycin, methodology 3348.
- Auxotrophy**, protoplast fusion, *Rhizoctonia solani* 5081.
- Auxotyping**, *Neisseria gonorrhoeae*, antibiotic sensitivity testing, gonorrhea epidemiology, man 482.
- Avena**, barley yellow dwarf virus disease resistance 5414.
- Avena byzantina**, barley yellow dwarf virus infection, double-stranded RNA 260.
pathogenesis, crown rust 7962.
- Avena fatua**, barley stripe mosaic virus virulence 6241.
- Avena sativa**, × *Avena sterilis*, inheritance, barley yellow dwarf virus disease resistance, plant breeding 772.
coleoptile, *Puccinia coronata* infection, urediniospores production 2791.
crown rust, *Puccinia coronata* f.sp. *avenae*, disease resistance, genetic analysis 3668.
disease resistance breeding, *Erysiphe graminis* f.sp. *avenae* powdery mildew 307.
dose-response effects, inoculation, barley yellow dwarf virus 8783.
ectomycorrhizas effects on growth, association clays media 2136.
genetic screening, disease resistance, *Puccinia coronata* 5469.
host specificity, *Helminthosporium victoriae* phytoalexins 7902.
isolation, *Puccinia graminis* races, incidence, geographical distribution, USA, Mexico 1125.
leaves, β -D-fructuranosidase physicochemical properties, crown rust, *Puccinia coronata* 2109.
leaves culture, cultivars effects on *Puccinia graminis* f.sp. *tritici* 1991.
patch, *Rhizoctonia solani*, surveys, soils (calcareous) 255.
- Avena sterilis**, disease resistance, *Puccinia coronata*, crown rust 4577.

- vermectin**, Streptomycetes antibiotics, inhibition, *Mucor miehei*, chitin, metabolism 6578.
- vermectin B**, subunits, synthesis 7465.
- vermectins**, production, Streptomycetes avermectilis, anthelmintic agents 120.
- verruca carbunculosa**, post-harvest decay, fruit rot, fungi 8876.
- verurin**, incorporation, aflatoxin B1, biochemistry 3742.
- mitochondria oxidative phosphorylation uncouplers 4472.
- nitrate repression, association, aflatoxins biosynthesis, *Aspergillus parasiticus* 220.
- cells, comparison, mammalian cells, cell culture, reovirus (avian) 5001.
- fecal coliforms, microbial pollution, rivers, Canada 1502.
- feeding, *Oospora lactis* triacylglycerol lipase, captivity 7008.
- vian encephalomyelitis virus**, antibodies, enzyme-linked immunosorbent assay use detection, chickens 5019.
- vian infectiosa bronchitis virus**, antibodies, detection, enzyme-linked immunosorbent assay, methodology 5017.
- antibodies detection, hemagglutination inhibition, neutralization, chickens 3245.
- genetic engineering, vaccines production 6637.
- vaccines contamination, screening projects 6658.
- vian laryngotracheitis virus**, DNA, isolation, purification, methodology 9284.
- live vaccines, infectivity, immunity, chickens 3180.
- vian reticulendotheliosis virus**, focus formation, bioassays, methodology 5015.
- vidin**, +biotin enhancement enzyme-linked immunosorbent assay, detection, herpes simplex virus, man 4154.
- biofertilized horseradish peroxidase complex, use, Spirochaetaceae microscopy 3283.
- vocado sunblotch disease viroid**, plant diseases, *Persea americana*, detection, electrophoresis 4525.
- vopacrin**, antibacterial activity association conformation, N.M.R. 6553.
- antibacterial activity, Clostridium, agar dilution test, animal isolates 3050.
- antibiotic sensitivity testing, *Escherichia coli*, *Pseudomonas aeruginosa* 9215.
- feeds additives, effects on feed efficiency, cattle 7878.
- high-pressure liquid chromatography 3154.
- stereochemistry 3153.
- wamycin**, Streptomycetes, biosynthesis, physicochemical properties, structure, antitumor activity, antibacterial activity 1441.
- Azobenzidine**, stability, antibacterial activity, *Escherichia coli* 7390.
- zadirachta indica**, seeds oils, pest control, *Nephotettix virescens*, vectors, rice tungro virus, *Oryza sativa* 6299.
- zaspirenadione**, derivatives, antimicrobial activity 2235.
- zasterol**, inhibition, Δ^24 -sterol methyltransferase activity, kinetics, *Saccharomyces cerevisiae* 7718.
- zeditin-2-one**, containing diarylsulfides, diarylsulfones, synthesis, antibacterial activity 9102.
- zide**, binding cytochrome peroxidase, E.S.R., *Pseudomonas aeruginosa* 3469.
- Azido-2'-deoxy nucleotides**, ribonucleoside-diphosphate reductase interaction, radicals, *Escherichia coli* 8556.
- 2'-Azido-di(3-ethyl benzthiazoline-6-sulfonic acid)**, +horseradish peroxidase media, bacteria detection, nitrogen peroxide production 5900.
- zifpos-methyl**, soil, biodegradation, bacteria soil isolates 4444.
- zocillin**, antibacterial activity, gram-negative bacilli 7431.
- antibacterial activity, *Pseudomonas aeruginosa* 7412.
- antibacterial activity, *Pseudomonas aeruginosa*, disc-diffusion test quality control 2282.
- antibiotic resistance, clinical isolates, bacteria 5715.
- antibiotic sensitivity testing, clavulanic acid effects on, *Bacteroides fragilis* 9164.
- antibiotic sensitivity testing, *Streptococcus faecalis* 4908.
- antibiotic synergism, aztreonam, antibacterial activity, gram-negative bacilli, *Staphylococcus aureus* 6504.
- bacterial activity, *Pseudomonas aeruginosa*, agar diffusion test, comparison, dilution tests 4841.
- high-pressure liquid chromatography, serum 509.
- +isomycin, antibiotic synergism, antibacterial activity, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa* 2271.
- +isomycin, antibiotic synergism, *Pseudomonas aeruginosa* antibacterial activity, kinetics 4836.
- Streptococcus* group B susceptibility 1381.
- zolla pinata**, fertilizers, *Oryza sativa* nitrogen cycle 3963.
- fertilizers, *Oryza sativa* nitrogen cycle 3964.
- zoepirillum**, inoculation + fertilizer applications, effects on yield, nitrogen fixation, *Oryza sativa* 1273.
- inoculation, nitrogen fixation, rhizosphere colonization, yield, Gramineae 2968.
- inoculation, *Sorghum bicolor*, effects on yield 5657.
- inoculation, *Sorghum bicolor*, effects on yield 6367.
- isolation, soil, Poland 4665.
- media (culture), reducing agents 4175.
- nitrogen fixation, leaf litter, *Saccharum officinale* 6353.
- nitrogenase, kinetics 19.
- plants growth regulators effects on 7272.
- rhizosphere, Gramineae, Mexico, subtropical zones 4634.
- zoepirillum brasiliense**, antagonism, Streptomycetes, fungi, role inoculum survival, soil 4658.
- antagonism, Streptomycetes, fungi, role inoculum survival, soil 4658.
- hydrogenase, activity, nitrite, nitric oxide, carbon monoxide, acetylene.
- Azospirillum brasiliense**, (continued) inhibition 8565.
- immuno-peroxidase test labelling, rhizoplane, *Pennisetum americanum* 1275.
- inoculation, nitrogen fixation, +fertilizers, yield, *Triticum durum* 7277.
- inoculation, nitrogen fixation, *Sorghum*, *Pennisetum* 5661.
- isolation, soil, characterization 2954.
- nitrogen fixation, inoculation, yield, *Pennisetum typhoides* 2963.
- nitrogen-fixing bacteria, application, *Triticum aestivum* response 3967.
- rhizosphere, Gramineae, Mexico, subtropical zones 4634.
- +vesicular-arbuscular mycorrhizas, inoculation, nitrogen fixation, nutrient uptake, yield, *Zea mays*, *Lolium perenne* 1257.
- Azospirillum lipoferum**, antagonism, Streptomycetes, fungi, role inoculum survival, soil 4658.
- rhizosphere, Gramineae, Mexico, subtropical zones 4634.
- Azotobacter**, alginic acid, biosynthesis, industrial applications 8618.
- +*Aspergillus awamori*, phosphate-dissolving bacteria, inoculation, composting 8391.
- nitrogen fixation, leaf litter, *Saccharum officinale* 6353.
- nitrogen fixation, pressmud, use, carriers, characterization 6374.
- production, indoles, gibberellins 8229.
- +*Rhizobium japonicum* mixed culture effects on, *Glycine max* nodulation, nitrogen fixation 2172.
- role, nitrogen cycle, books 4238.
- soil microorganisms, *Psidium* leaves effects on, in situ 4643.
- soil, Trinidad, Tobago 6359.
- Azotobacter chroococcum**, +*Achnomyces thermophilus*+*Mixobacteriales*+*Streptomycetes*+*Bacillus*, inoculum, effects on yield, *Solanum tuberosum*, *Zea mays* 8201.
- antagonism, biological control, *Rhizoctonia solani* infection, *Solanum tuberosum* 2088.
- extracellular polysaccharides production 3533.
- inoculation, nitrogen fixation, +fertilizers, yield, *Triticum durum* 7277.
- nitrogen fixation, isocitrate dehydrogenase activity, strains screening methodology 1537.
- nitrogen fixation+vesicular-arbuscular mycorrhizas, seedlings inoculation, yield, *Lactuca sativa* 6375.
- secretions, effects on, fungi, phylloplane, *Glycine max* 7252.
- soil inoculation, nitrogen fixation 4652.
- Azotobacter vineliana**, dissolved oxygen effects on nitrogen fixation, immobilized cells 3550.
- excretion, amino acids, vitamins, soil 1266.
- flavodoxin, apoproteins, purification methodology 5913.
- flavodoxin, purification, characterization, adsorption use, chromatography 4260.
- gene expression, *Klebsiella pneumoniae*, nitrogen fixation, genes 1280.
- hydrogenase purification 6858.
- methyl isocyanide inhibition nitrogenase 1816.
- methylamine uptake measurement, filtration methodology 4195.
- nitrogen fixation, dissolved oxygen effects on 3551.
- nitrogen-fixing bacteria, *Saccharum* 5652.
- nitrogenase complex, oxygen inhibition 885.
- nitrogenase, iron-sulfur centers levels, ATP binding 2608.
- nitrogenase, kinetics 19.
- respiration, nitrogen fixation, soil water potential 8237.
- Aztreonam**, antibacterial activity, mixed culture, *Escherichia coli*, *Bacteroides* 9182.
- antibacterial activity, *Pseudomonas aeruginosa* 7377.
- antibiotic synergism, amikacin, antibiotic sensitivity testing, *Pseudomonas aeruginosa*, *Pseudomonas cepacia*, clinical isolates, cystic fibrosis, children 3170.
- antibiotic synergism, antibacterial activity, gram-negative bacilli, *Staphylococcus aureus* 6504.
- +cefoperazone, +amikacin, serum bactericidal activity, *Escherichia coli*, *Klebsiella pneumoniae*, *Serratia marcescens*, *Pseudomonas aeruginosa* 8344.
- + β -lactam antibiotics, +amikacin, antibacterial activity, gram-negative bacilli 3156.
- Azurin**, N.M.R., *Pseudomonas aeruginosa* 2564.
- N.M.R., *Pseudomonas aeruginosa* 6928.
- Pseudomonas fluorescens*, fluorescence, role copper 909.
- Baccharis crispa**, extracts antibacterial activity, *Bacillus subtilis*, *Micrococcus luteus*, *Staphylococcus aureus* 4012.
- Baccharis notoserigila**, extracts antibacterial activity, *Bacillus subtilis*, *Micrococcus luteus*, *Staphylococcus aureus* 4012.
- Bacillomycin**, *Bacillus subtilis*, effects on *Saccharomyces cerevisiae* growth, cytoplasmic membranes structure 4886.
- Bacillus**, +*Achnomyces thermophilus*+*Azotobacter chroococcum*+*Mixobacteriales*+*Streptomycetes*, inoculum, effects on yield, *Solanum tuberosum*, *Zea mays* 8201.
- alkalophilic bacteria, proteinase 8613.
- antibacterial activity, sodium citrate, release, calcium, magnesium 7376.
- antibiotics production, isolates, wastewater treatment 9234.
- API test, identification 9317.
- biological control, decay fungi, *Fagus sylvatica* 5589.
- biological control, decay fungi, *Fagus sylvatica*, field trials 5587.
- cellulase production, screening projects 6883.
- cellulolytic enzymes, purification, characterization, activity 5182.
- chaetomycin, antifungal activity, *Chaetomium olivaceum* 4067.
- contamination, blood culture, transmission, role, cotton use disinfection 3223.
- cyclomaltodextrin glucanotransferase, immobilization, characterization 5191.
- cyclomaltodextrin glucanotransferase production 7679.
- decarboxylation, phthalic acid, biodegradation 998.
- diethyl phthalate biodegradation 2723.
- enumeration, spore germination, heat activation, milk agar, media (isolation) 1911.
- extracellular polysaccharides production 3533.
- fatty acids production, milk 1909.
- genetic engineering, gene transfer, fermentation, reviews 3593.
- glucose isomerase, production, characterization 2618.
- glucose, pyrolysis products, mass spectroscopy 5052.

Bacillus, (continued)

- industrial effluents distilleries, nutrient requirements, urea, sodium phosphate 5816.
interference membrane filtration, coliforms, drinking water 2391.
β-lactamase, gene expression, *Escherichia coli* plasmid pEAP2 894.
α-lactate acid bacteria, retting, organocell evaluation, fermented food, cassava 3698.
levan production 4365.
levans biosynthesis, nitrogen sources 7764.
nutrient requirements, carbon sources, endospores formation, soil 4619.
production, indoles, gibberellins 8229.
γ radiation disinfection, sewage sludge 5823.
soil isolates, cellulase, cellulose hydrolysis, pH effects on 7692.
soil microorganisms, aluminum phosphate utilization, phosphorus sources 2151.
soil microorganisms, methoxychlor effects on, biodegradation 9024.
soil, Trinidad, Tobago 6359.
spore germination, inactivation, acids, food, reviews 7026.
spores, resistance, chlorine, disinfection, food industry 6413.
thermophilic bacteria diversity, sewage sludge, thermodynamics association 546.
thermophilic microorganisms, α-amylase, β-amylase, purification, characterization 7705.
Bacillus amyloqueluaciens,
α-amylase, maltose, glucose production, reviews, α-D-glucosidase applications 4360.
endonucleoxynuclease BamH1, production, media (culture) 8549.
Bacillus anthracis,
identification methodology, use lectins 2491.
radioimmunoassay association, use, radioactive labelling *Staphylococcus aureus* protein A 8480.
spores, identification, radioimmunoassay, methodology 677.
toxins, protection antigens, genes, cloning 1083.
Bacillus applanis,
α-amylase production, nutrient requirements 7758.
Bacillus brevis,
biodegradation, 4-chlorobiphenyl 5304.
endonucleoxynuclease BbvII, isolation, substrate specificity 1741.
gramicidin S, ATP, ADP affinity 1403.
gramicidin S, biosynthesis, phenylalanine, role 8381.
gramicidin S synthetase multienzyme complexes, inactivation control, antibiotics production 1375.
protoplasts, formation, methodology 1632.
tryptophan 2,3-dioxygenase, purification, characterization 6042.
Bacillus cereus,
antibacterial activity, spices, *Salvia officinalis* 8719.
antibacterial activity, *Streptococcus cremoris* bacteriocins, role dairy starters 2311.
antimicrobial activity, atranorine 4781.
biodegradation, glucosinol, rapeseed meals 1042.
Cassia papaya, plant extracts antibacterial activity 2220.
contamination, skim-milk powder 7000.
diproteins, isolation, physicochemical properties, structure 6804.
fatty acids, concentration methodology 4212.
food contamination, Thailand 6970.
hydrochloric acid, chlorine dioxide, antibacterial activity, models 8721.
β-lactamase, hydrolysis, penicillins, cephalosporins, kinetics 4273.
β-lactamase, hydrolysis substrates, pH, deuterium oxide effects on, kinetics 4278.
β-lactamase, hydrolysis, sulbenicillin, carbenicillin, pH role 4277.
β-lactamase, inhibition, cis-platinum diamminodichloride,
6-methyl-pyrid-2-yl-amine palladium-dichloride 1754.
β-lactamase, 6-p-(trifluoromethane sulfonyl)-aminoantipenicillin acid
sulfone, derivatives, inactivation 1780.
α-methylstyrene biodegradation 2700.
oligo-1,6-glucanase, purification, immunoaffinity chromatography,
characterization 103.
phospholipase C active site N.M.R., X-ray crystallography 5966.
serine proteinase active sites flanking regions, amino acid sequence, comparison
Bacillus thuringiensis 5153.
Bacillus circulans,
alginate lyase, purification, characterization 3518.
α-amylase, purification, characterization, production maltotetraose,
maltopentaose 1763.
compound Bu-2743E production, aminopeptidase (cytosol) inhibitors 1702.
+Phaffia rhodozyma mixed culture, carbon sources, lytic enzymes activity
relationship astaxanthin extraction 1743.
1,4-β-D-xylanase, 1,3-β-D-glucanase, 1,6-β-D-glucanase, biosynthesis,
cyclic AMP regulation 6036.
Bacillus coagulans,
spore germination, heat resistance, antibacterial activity, sodium citrate 7374.
spores, release, calcium, magnesium, sodium citrate antibacterial activity 7375.
xylose isomerase, immobilized enzymes, starch processing 111.
cyclodextrinase, purification, characterization 1785.
Bacillus colistinus,
colistin production, feedback inhibition 4876.
protoplasts, liposomes, plasma membranes, role antibiotic resistance, colistin
9074.
Bacillus licheniformis,
α-amylase biosynthesis, sporulation correlation 1821.
β-amylase, maltose, glucose production, reviews, α-D-glucosidase
applications 4360.
α-amylase production, continuous culture 6035.
antibiotic resistance ermC gene, ermD gene, gene regulation, role protein
biosynthesis, ribosomes 5427.
autotrophs mutants isolation, role clavulanic acid 7811.
bacitracin A, copper(II) complex, E.S.R. 1413.
bacitracin biosynthesis, nutrient requirements, amino acids, proteins 1403.
biosynthesis, proteinase, extraosomal enzymes, bacitracin, temperature effects
on 4879.
isolation, luncheon meat, biodegradation 2727.
β-lactamase, β-lactam antibiotics hydrolysis 4689.
plasmid pLP11, transformation, gene expression, temperature effects on, *Bacillus*
stearothermophilus 8543.
recovery methodology, kidney diseases, man 1633.
Bacillus licheniformis, (continued)
spore germination, heat resistance, antibacterial activity, sodium citrate 7374.
spores, release, calcium, magnesium, sodium citrate antibacterial activity 7375.
spores, sterilization, canning, tomatoes 7033.
surfactants production, use petroleum recovery 5285.
temperature effects on, sporulation, bacitracin biosynthesis, proteinase
biosynthesis 5974.
Bacillus macerans,
glucose, fermentation, products, pH, effects on 2690.
Bacillus megaterium,
antibiotic resistance, penicillin acylase, hydrolysis,
α-aminoacylbenzylpenicillin derivatives 7331.
biodegradation, T.C.D. 2713.
copper toxicity, siderophores enhancement 6444.
micrococcal antibiotic resistance mutants, ribosomal protein L11 structure 6432.
penicillinamide, DNA, plasmids, transformation, production 95.
penicillin-binding protein, nocardin A interaction, elongation inhibition 1397.
proteinase, extracellular enzymes, temperature effects on 4292.
protoplasts, gramicidin S cytotoxicity 7467.
spores, radiosensitivity, oxygen levels effects on superoxide dismutase 4743.
Bacillus mesentericus,
proteinase, purification, affinity chromatography 7732.
proteins excretion, glycine stimulation 1725.
proteolytic enzymes purification 4337.
Bacillus penetrans,
biological control, *Meloidogyne javanica* 1853.
Bacillus polymyxa,
glucose fermentation, 2,3-butanediol production 7782.
Bacillus polymyxa,
colistin production, aeration effects on 4880.
colistin production, factors affecting 1424.
colistin production, stimulation, aspartic acid, phosphate 3148.
crop residues biodegradation, *Penicillium symbiosia* activity 3673.
hemicelluloses fermentation, 2,3-butanediol production 5223.
Bacillus pumilus,
1-deoxy-alto-heptulosephosphate synthase, isolation, characterization 1766.
extracts, 1-deoxy-D-threo-pentulose, 1-deoxy-L-threo-pentulose, biosynthesis
5204.
Bacillus sphaericus,
D-acetylserine (thiol)-lyase, purification, characterization 4329.
D-alanine aminotransferase activity, β-cyano-D-alanine inactivation,
temperature role 7717.
biodegradation, leather, museums, Kuwait 1024.
biological control, predator-prey interactions, *Toxorhynchites*, *Culicidae* 1841.
efficacy, persistence, ponds, biological control, *Culicidae* 6914.
endopeptidase I activity, temperature, sodium dodecyl sulfate effects on 5129.
α-endotoxin, spore crystals, toxicity, larvae, *Culex pipiens*, *Anopheles*
stephensi 3572.
leucine dehydrogenase, +*Bacillus sphaericus* formate dehydrogenase, L-leucine
production, membranes reactors 3.
leucine dehydrogenase, substrate specificity, kinetics, pyridoxal 5'-phosphate
inactivation 5149.
media (culture), growth, sporulation, larvicides activity 127.
microbiology, pathology, genetics, biological control, *Culex*, *Anopheles* 6898.
α-fate, biological control, growth, biological control, *Culicidae* 6920.
phage typing, pathogenicity, biological control, larvae, *Culex quinquefasciatus*
2663.
pimelic acid determination methodology 3295.
production, formulation, biological control, *Culicidae* 6897.
spore crystals, biological control, larvae, *Culicidae* 6917.
spore fate, biological control, larvicides, ponds, *Culex tarsalis*, *Anopheles*
franciscanus 1845.
spores powder, biological control, *Culex quinquefasciatus* 6918.
sporulation, relationship, toxicity, *Culex pipiens*, larvae, biological control
6089.
toxicity, biological control, pollution effects, fresh water, larvae, *Culex*
quinquefasciatus, *Aedes aegypti* 2658.
toxins genes, gene expression, use biological control 8628.
transformation, protoplast fusion, plasmid pB110, plasmid pBC16, sporulation,
biological control, *Culicidae* 2666.
virulence, biological control, *Simulium damnosum* 5261.
Bacillus stearothermophilus,
agar diffusion test, cow's milk, penicillin detection 7437.
α-amylase, heat inactivation, ultrahigh temperature sterilization, dairy
products 6974.
ethanol production, biotechnology, thermophilic bacteria enzymes 7794.
gas production, spoilage, canned food, beans 6988.
D-glucosidase, purification, characterization, electrophoresis 6838.
glycylglycyl-phosphate dehydrogenase activity, NAD analogs binding 1790.
indicator species, quality control, steam sterilization efficacy 476.
malate dehydrogenase, kinetics, poly(ethylene glycol) bound NAD⁺ derivatives
effect on 76.
phosphoglucanase dehydrogenase stability, comparison yeasts 73.
plasmid pLP11 stability, gene expression, β-lactamase, *Bacillus licheniformis*
transformation, temperature effects on 8543.
pyruvate dehydrogenase (liponamide) complex, domains structure, N.M.R. 3462.
ribosomal protein L6, crystal structure, X-ray diffraction 7662.
ribosomal subunit 50S, crystals, electron microscopy 874.
spore germination, heat resistance, antibacterial activity, sodium citrate 7374.
spores, bioassays, sterilization, inactivation, dental manipulation, medical
instruments 7545.
spores, heat resistance bioassays 6493.
spores, release, calcium, magnesium, sodium citrate antibacterial activity 7375.
thermocin, antibacterial activity mechanisms 3127.
thermophilic microorganisms, culture, dissolved oxygen levels, temperature
effects on 9296.
triacylglycerol lipase biosynthesis, fermentation conditions 6020.
tyrosyl-tRNA synthetase amino acid sequence homology, methionyl-tRNA synthetase
Escherichia coli 2621.
tyrosyl-tRNA synthetase, X-ray crystallography, structure-activity relationships,
site-directed mutagenesis tyrosyl-tRNA synthetase genes 3573.
Bacillus subtilis,
aconitate hydratase, histidine ammonia-lyase, formation, 2-ketoglutarate
regulation 4281.
α-amylase, immobilized enzymes, kinetics 1772.
amylase production, industrial strains, morphology 6880.

Bacillus subtilis, (continued)

- β -amylase, production, purification 940.
 α -amylase reactivation, immobilized enzymes 4301.
 α -amylase, starch fermentation, ethanol production 8682.
antagonism, *Phytophthora cactorum* crown rot, biological control, seedlings, *Malus pumila* 7212.
antibacterial activity, acetonyl salicylate 6464.
antibacterial activity, *Agelas* metabolites 9133.
antibacterial activity, antibiotic B-371, structure-activity relationships 8338.
antibacterial activity, extracts, *Baccharis crispa*, *Baccharis notosergeria* 4012.
antibacterial activity, formazans 9139.
antibacterial activity, mellicopeptin, teleanthine, 6-methoxy teleanthine, bark, *Podocarpus thibetanus* 4738.
antibacterial activity, *Phytophthora suaveolens*, biphenyls, derivatives 9096.
antibacterial activity, 5-fluoro-2-(nitrofuryl)-2-benzimidazole 9136.
antibiotics production, oxafun, inhibition, antagonism, *Phoma betae*, rhizosphere 2139.
antimermic A, antibacterial activity 5798.
Aspidosperma excelsum alkaloids antibacterial activity 5730.
bacillomycin, tunin A, effects on *Saccharomyces cerevisiae* growth, cytoplasmic membranes structure 4886.
biological control, post-harvest decay, brown rot, *Monilinia fructicola*, fruits 8053.
celluloxime+water, antibacterial activity, disc-diffusion test 4046.
cell membranes, serine proteinase, purification, characterization 1783.
cell wall biodegradation, carbon sources, *Agaricus bisporus mycelia* growth 6151.
chemotactic methyltransferase, purification, kinetics, characterization 3486.
cytochrome c oxidase effects on streptomycin uptake 9196.
1-deoxyinosinilic acid production 7471.
endo-1- α -L-arabinase, purification, characterization, potatoes tissue disintegration 1781.
enzymes preparations efficacy, mirin biosynthesis, alcohol concentration relationship 982.
fuel cells, electron transfer, redox potential mediators 5243.
hexamethylene diamine biodegradation, storage conditions effects on 1007.
hydrogen peroxide antibacterial activity mechanisms 4007.
immobilization subtilisin, aluminum oxide 7734.
immobilized enzymes, factors affecting α -amylase inactivation 881.
inhibition, growth, role Maillard reaction products 7357.
tunin A amino acid composition 2301.
lichenase, purification, characterization 8655.
lytic enzymes, enzymatic activity, *Clostridium saccharoperbutylacetonicum*, cell walls, peptidoglycans 5994.
macromolecules biosynthesis, antibacterial activity, ravidomycin 4864.
mutagenesis, proteinase production 6828.
nucleic acid transformation, α -amylase purification, characterization 4287.
nuclease, purification, characterization 5998.
proteinase, hydrolysis, casein, elastin 921.
proteinase, immobilization, cellulose supports, activity 5999.
proteins production optimization, genetic engineering 3423.
proteolytic enzymes, extraction, oils seeds, *Brassica napus*, *Glycine max* 3494.
proteolytic enzymes, inhibition, quaternary ammonium compounds 4957.
protoplasts, gramicidin S cytotoxicity 7487.
RSC assay, role metabolic activation, mutagenicity testing, methodology 3329.
ribonucleic acid biosynthesis, glucose, nitrogen, effects on 1411.
single-cell protein production, bagasse fermentation 1734.
spores, bioassays, sterilization, inactivation, dental manipulation, medical instruments 7545.
spores, pH effects on, bactericidal activity, peracetic acid 7550.
spores, recovery methodology, beef 6965.
spores, release, calcium, magnesium, sodium citrate antibacterial activity 7375.
spores, removal, air filtration, fermenters 8504.
sporulation, cytoplasmic membranes, proteins, purification, characterization 2555.
sporulation, stringent response, antibiotics effects on 2242.
subtilin biosynthesis 1418.
survival, oil samples 9040.
thiuronic acid, primary structure 7659.
vegetative cells, sporulation promotion factors, detection methodology 3334.
Bacillus subtilis var. niger,
spores, ethylene oxide resistance, sterilization cycles 4035.
spores, sterilization solutions, propylene oxide, chlorhexidine diacetate 4784.
Bacillus thermoproteolyticus,
neutral proteinase, immobilization, activity, thermal stability, radiation polymerization 1759.
Bacillus thuringiensis,
aminopeptidase, purification, methodology 5136.
biological control, *Choristoneura fumiferana*, endotoxins induction anorexia 3570.
biological control, *Choristoneura fumiferana*, foliar applications, efficacy, persistence 3556.
biological control, *Choristoneura fumiferana*, forests, *Abies balsamea* 7778.
biological control, *Choristoneura fumiferana*, USA, Wisconsin 139.
biological control, *Culicoides*, *Leptoconops*, bioassays 3573.
biological control, *Diorhyctes amatella* 8645.
biological control, effects on hemolymph amino acids, larvae, *Spodoptera littoralis* 6912.
biological control, effects on predator-prey interactions, larvae, *Spodoptera littoralis* 8643.
biological control, efficacy, bioassays, *Culicoides* larvae 6083.
biological control, efficacy, *Chironomus salinarum*, population density, lakes 6084.
biological control, foliar applications, *Choristoneura fumiferana* 2652.
biological control, insecta, environmental factors 2671.
biological control, instars susceptibility, *Choristoneura fumiferana* 3554.
biological control, larvae, *Culex* declarator, *Simulium gouldii* 136.
biological control, onchocerciasis vectors, streams, *Simulium ochraceum*, Mexico 6915.
biological control, paddy fields, *Psorophora columbiae* 5264.
biological control, pest control, *Etiella behrii* 2644.
biological control, *Plectra interpunctella*, *Ephestia cautella* 4386.
biological control, predator-prey interactions, *Toxothynchites*, *Culicoides* 1841.
biological control, snow pouts, *Aedes*, USA, Michigan 6919.
cell culture, growth, computer applications, monitoring, control 3326.
 δ -endotoxin, toxicity, biological control, *Pectinophora gossypiella*, *Earias insulana*, *Agrotis ipsilon* 5247.
endotoxins, biological control, *Anopheles gambiae* 134.

Bacillus thuringiensis, (continued)

- endotoxins, *Choristoneura fumiferana*, cell lines, selection, resistance 8895.
endotoxins, use, biological control, larvae, *Spodoptera littoralis*, *Boarmia senaleria* 118.
 β -exotoxin, biological control, *Leptinotarsa decemlineata* 125.
exotoxins, biological control, bioassays, toxicity, larvae, *Hypera postica* 8641.
exotoxins, high-performance liquid chromatography, assays, insecticides, biological control 2786.
exotoxins, mortality, larvae, *Achaea janata* 1852.
exposure time effects on mortality, recovery, *Choristoneura* 3555.
foliar applications, spores persistence, biological control, *Gossypium* 117.
formulations, aerial applications, distribution, paddy fields 6902.
formulations, preservatives, xylene, sorbitol, biological control, *Choristoneura fumiferana* 2667.
glutaminephosphoribosyl isomerase (glutamine-forming) activity, antipicasin inactivation 6043.
gramicidin D effects on proteinase activity 1412.
gramicidin D effects on proteinase activity 6025.
host-pathogen interactions, host-parasite interactions, predator-prey interactions, *Spodoptera littoralis*, *Zelex chlorophthalma*, *Paederus altieri*, Egypt, Arab Rep. 128.
mutagenesis, resistant mutant, U.V. radiation, temperature, use biological control, insects 6746.
pathogenicity, biological control, *Boarmia senaleria* 129.
pathogenicity, biological control, *Culicoides* 6085.
pathogens, biological control, *Mansonia uniformis* 123.
persistence, soil, immunofluorescence 3580.
pest control, efficacy, *Simulium vittatum*, USA, Tennessee 6086.
+pesticides, integrated control, *Heliothis virescens* 135.
proteinase biosynthesis, amino acids effects on 918.
proteinase biosynthesis, amino acids effects on 6029.
proteinase, extracellular enzymes, biosynthesis, proteins effects on 1818.
serine proteinase active sites flanking regions, amino acid sequence, comparison *Bacillus cereus* 5153.
serotypes, endotoxins, toxicity, *Aedes aegypti*, biological control 8635.
spore crystals, surface net, morphology, toxicity, biological control, *Bombyx mori* 2660.
spores, dispersal, mathematical models 3544.
spores powder, biological control, *Culex quinquefasciatus* 6918.
spores, protection, sunlight inactivation, biological control 119.
sporulation, toxins biosynthesis, fermentation media 6070.
strains pathogenicity, biological control, taxonomy 6924.
toxicity, *Aedes aegypti*, *Culex molestus*, larvae, biological control 8647.
toxicity, biological control, pollution effects, fresh water, larvae, *Culex quinquefasciatus*, *Aedes aegypti* 2658.
 δ -endotoxin, propagation, why recycling methodology, biological control, insects 6899.
toxins precursors biosynthesis, genetic control 4487.
toxins, toxicity, comparison peptide antibiotics, larvae, *Aedes aegypti* 2661.
Bacillus thuringiensis subsp. entomocidus,
endotoxins, biological control, *Spodoptera littoralis* 3563.
Bacillus thuringiensis subsp. berliner,
biological control, larvae density effects on mortality, *Aedes aegypti* 4396.
 β -exotoxin days formulations, pest control, *Polydora* 4398.
Bacillus thuringiensis subsp. colmeri,
antigenic characteristics, pathogenicity, insects 6913.
Bacillus thuringiensis subsp. darmstadtensis,
spore crystals, toxicity, insects 6082.
Bacillus thuringiensis subsp. entomocidus,
biological control, *Spodoptera littoralis* 3564.
endotoxins, biological control, *Spodoptera littoralis*, *Spodoptera exigua* 3566.
Bacillus thuringiensis subsp. galleriae,
growth, media (culture) 1613.
media (culture), nutrient requirements, amino acids, vitamins 7803.
nutrient requirements, spore crystals, inoculum production, use biological control 7601.
Bacillus thuringiensis subsp. israelensis,
biological control, composts, *Lycoriella maki* 6103.
biological control, *Culex pipiens*, *Aedes aegypti*, Israel 2672.
biological control, *Culex pipiens*, *Aedes aegypti*, Israel 3543.
biological control, efficacy, *Simulium*, USA, South Carolina 4391.
biological control, field trials, *Culicoides* 6916.
biological control, *Simuliidae* 137.
biological control, streams, *Simuliidae*, USA, New Hampshire 7789.
Culicoides biological control, field trials 1854.
 δ -endotoxin, cytopathology, cell culture, *Aedes aegypti* 4491.
larvicides, *Haematobia irritans*, biological control 5209.
lethality, larvae, *Culex pipiens molestus*, *Theobaldia longiareolata*, crowding effects on 124.
powder, media (culture), production 3562.
proteins crystals, solubilization methodology, toxicity, *Aedes aegypti* larvae 1859.
proteins toxicity association *Culicoides*, isolation, characterization 1733.
toxins, biological control, *Culicoides*, toxicity 7790.
toxins precursors biosynthesis, genetic control 4487.
Bacillus thuringiensis subsp. kurstaki,
biological control, dose-response effects, field trials, USA, Michigan, *Choristoneura fumiferana* 6078.
endotoxins, biological control, *Spodoptera littoralis*, *Spodoptera exigua* 3566.
+Neopeletaria carposcapae, biological control, pest control, *Platyphila cardui* 5218.
purification, cytotoxicity, binding, glycoproteins receptors, plasma membranes, *Choristoneura fumiferana* 5387.
toxins precursors biosynthesis, genetic control 4487.
Bacillus thuringiensis subsp. tenebrionis,
biological control, *Coleoptera* 3569.
Bacillus thuringiensis subsp. thuringiensis,
dosage, effects on *Spodoptera littoralis* 6087.
Bacillus thuringiensis var. entomocidus,
pathogenicity, synergism, chitinolytic bacteria, phagostimulants, protection, U.V. radiation, *Spodoptera littoralis*, biological control 131.
Bacillus thuringiensis var. israelensis,
suspended matter, turbidity, effects on biological control efficacy, *Aedes aegypti*, *Culex pipiens* 8642.
Bacillus thuringiensis var. kurstaki,
media (culture), γ -endotoxin production 7786.

- Bacitracin**,
antibacterial activity 2278.
antibacterial activity, clinical isolates, *Staphylococcus* 4805.
antibacterial activity, differentiation, *Staphylococcus*, *Micrococcus*, agar diffusion test 1661.
biosynthesis, *Bacillus licheniformis*, nutrient requirements, amino acids, proteins 1403.
biosynthesis, temperature effects on, *Bacillus licheniformis* 4879.
biosynthesis, temperature effects on, *Bacillus licheniformis* 5974.
- Bacitracin A**,
copper(II) complex, E.S.R., *Bacillus licheniformis* 1413.
- Bacon**,
canned food, fumaric acid esters, inhibition *Clostridium botulinum*, toxins formation 7034.
canned food, *Staphylococcus aureus* growth, enterotoxin A formation, water activity, temperature, oxygen 6979.
contamination, *Clostridium botulinum* toxins production, radiation effects on 7039.
contamination, *Clostridium botulinum* toxins production, radiation effects on 7039.
food processing, spoilage, starter cultures 3709.
- Bacterac test**,
bacteremia detection, blood culture media 7572.
bacteria growth, chemotaxis assays effects on, cancer patients 3319.
blood culture, false-positives, bacteria contamination, clinical microbiology 704.
comparison, lysis centrifugation, detection, bacteria, man 3313.
detection, bacteremia 742.
detection, bacteremia, blood culture, effects on, man 2521.
detection rates, *Mycobacterium tuberculosis*, *Mycobacterium kansasii*, *Mycobacterium avium*, *Mycobacterium fortuitum* 7583.
identification, *Mycobacterium*, urease activity 692.
media, antibiotics antibacterial activity reduction 6458.
media (culture) comparison, *Mycobacterium* isolation 1581.
media (culture), hypertonicity, detection, *Haemophilus influenzae* 698.
- Bacteremia**,
blood culture, effects on, Bactec test, detection, man 2521.
detection, Bactec test 742.
detection, blood culture, lysis + centrifugation 755.
detection, blood culture media, Bactec test 7572.
detection, blood culture, media (culture) 1604.
detection, blood culture, samples volume 702.
detection, liquid culture, aerobic conditions, anaerobic conditions, effects on 2514.
detection, sucrose, liquid culture, man 2522.
diagnosis, blood culture analysis, acridine orange use 1667.
diagnosis, man, culture methodology 1630.
man, detection methodology, centrifugation, filtration 2458.
Staphylococcus aureus, endocarditis, measuring techniques, antibodies, teichoic acid, comparison, α -hemolysin, diagnosis, man 7620.
- Bacteria**,
acidine orange, staining, detection, blood culture 672.
aerosols, mortuaries, environmental hygiene, ventilation 2415.
agar, tea powders, inhibition 7369.
airborne microorganisms, dispersal, waste water irrigation 1456.
alicyclic ring biodegradation, reviews 8277.
aminoglycoside antibiotics, antibiotic resistance, reviews 9051.
 α -amylase, desizing, fabrics, textile industry 52.
 α -amylase, dextranase, hydrolysis, starch, dextran, sucrose production, industries 53.
 α -amylase measuring techniques, p-nitrophenylglycosides substrates 1794.
 α -analysis, clinical microbiology, information systems, computer applications 6770.
analysis, drinking water, USA, Nebraska 3209.
analysis, pharmaceuticals, syrups 4136.
analysis, urine screening methodology 1651.
analysis, urine screening methodology 1670.
animal isolates, antibiotic sensitivity testing 7420.
animal isolates, drug sensitivity testing 1326.
animal isolates, *Serpentes*, in vitro, in vivo, antibacterial activity, ceftazidime 5766.
antagonists, effects on pathogenesis, *Phytophthora cactorum* crown rot, Malus 5511.
antibacterial activity, antibiotics, inhibition, protein biosynthesis, nucleic acids, cytoplasmic membranes, cell walls biosynthesis, tetrahydrofolate biosynthesis 9174.
antibacterial activity, clindamycin + ceftazidime 6515.
antibacterial activity, flavonoids, *Salvia palaestina* 4008.
antibacterial agents, activity, effects on, cell membranes, ribosomes, nucleic acids, amino groups 9094.
antibiotic FK 027, antibacterial activity, comparison, cefaclor, cephalixin, amoxicillin 2316.
antibiotic resistance 9067.
antibiotic resistance, antibacterial activity, rifamycin 7340.
antibiotic resistance, antibiotics, feeds additives, livestock, reviews 9062.
antibiotic resistance, books 3337.
antibiotic resistance, cephalosporins 7333.
antibiotic resistance, chloramphenicol, long-term effects 7323.
antibiotic resistance, chloramphenicol, reviews 9052.
antibiotic resistance, chlorination effects on, sewage isolates 6437.
antibiotic resistance, clinical isolates, surveys 9047.
antibiotic resistance, conferences 847.
antibiotic resistance mechanisms, antibiotics uptake, reviews 9049.
antibiotic resistance mechanisms, evolution, selection, reviews 9056.
antibiotic resistance mechanisms, mutation, reviews 9048.
antibiotic resistance, relationship, antibiotics use, hospitals 3030.
antibiotic resistance, role β -lactamase, infection, clinical aspects, reviews, man 3031.
antibiotic resistance, screening 7315.
antibiotic resistance, selection, antibiotics treatment, man 6404.
antibiotic sensitivity testing 2249.
antibiotic sensitivity testing, automated methods 3258.
antibiotic sensitivity testing, cefoperazone 502.
antibiotic sensitivity testing, cefotaxime, disc-diffusion test 1387.
antibiotic sensitivity testing, clinical isolates, treatment, endometritis, cattle 4813.
antibiotic sensitivity testing, factors affecting disc-diffusion test, petri dishes 2245.
antibiotic sensitivity testing media 9151.
antibiotic sensitivity testing, photometry, computer applications 3076.
antibiotic sensitivity testing, urinary tract infection, isolates, dogs 4787.
antibiotics activity, relationship, structure, physiology 9168.
antibiotics, antibacterial activity, structure-activity relationships, clinical trials 9172.
antibiotics biosynthesis, pH levels 2246.
antibiotics biosynthesis, relationship antibiotic resistance, reviews 9057.
antibiotics, structure, resistance, antimicrobial activity, reviews 2234.
antigens, cerebrospinal fluid, detection, agglutination comparison counter immunoelectrophoresis 2483.
antimicrobial activity, *Butea monosperma* seeds oils 4782.
antimicrobial activity, disinfectants, antiseptics, antimicrobial agents preservatives 9137.
antimicrobial activity, *Orchidaceae* roots oils 4779.
antimicrobial agents, antibiotics, structure-activity relationships, reviews 9170.
arginine dihydrolase, amino acid decarboxylase, detection, methodology 772.
association, *Hyalella azteca*, methodology, characterization, drinking water, disinfection 6712.
bacteria detection, bioluminescence, man 6767.
batch culture, growth kinetics, products inhibition 6104.
beer spoilage, media (isolation) 4192.
biodegradation, α -methylstyrene 2700.
biodegradation, aromatic compounds + halogens, mechanisms, reviews 7826.
biodegradation, benz[a]pyrene, soil 4637.
biodegradation, carburetor, fensholtion, pesticide pollution, soil pollution 2173.
biodegradation, chitin, membranes 1036.
biodegradation, chlorophenol, sewage sludge 2703.
biodegradation, *Crassostrea gigas*, shells, minerals 4439.
biodegradation, dibenzothioephene, thianaphene, 2-thiophenecarboxylic acid, reviews 7825.
biodegradation, heparin, chondroitin sulfate, media use detection 9293.
biodegradation, hydrocarbons, reviews 8276.
biodegradation, monohaloalkenyl biphenyls water pollution, sediments, aquatic environment, wastewater treatment 3682.
biodegradation, oil, association, carboxalates 4684.
biodegradation, oil, dispersants, effects on 1303.
biodegradation, oil, sampling, enumeration, reviews 4437.
biodegradation, oil, sea water, continuous culture 1893.
biodegradation, oil spills, characterization 1302.
biodegradation, phthalic acid, reviews 7828.
biodegradation, pulp mills, effluents 1467.
biodegradation, resistance, heavy metals pollution 3680.
biodegradation, Xenobiotics, industrial wastes 8393.
biodegradation, xenobiotics, inhibition, exudates, aquatic microorganisms 8687.
biodegradation, xenobiotics, inhibition, exudates, aquatic microorganisms 8687.
biodegradation, forest products, colonization, succession, preservatives, effects on 1241.
biodegradation, fouling organisms, control, oil, forest products, effluents, books, conferences 1697.
biodegradation, leather, museums, Kuwait 1024.
biodegradation, oil, emulsions, pasteurization, antimicrobial activity, mathematical models 1297.
biodegradation, standard reference materials 1028.
biological control, decay fungi, *Fagus sylvatica* 5589.
biological control, insecta 8639.
biomass, community structure, fatty acids analysis, *Rhizophora* sediments 8969.
biomass, composts, methodology 5684.
biomass, soil, levels, muramic acid, α , ϵ -diaminopimelic acid 5614.
bioreactors, digestion (anaerobic), wastewater treatment 4110.
biosynthesis, echinomycin, triostin A, N.M.R. 4066.
blood culture, antibiotic sensitivity testing, Autoclave test 494.
blood culture, comparison, liquid culture, isolation, methodology 3280.
blood culture, detection, electrical impedance measuring techniques 2484.
blood culture, isolation, centrifugation + lysis 1529.
blood culture, staining, methylene blue, acridine orange, Gram stain 703.
carbon compounds biodegradation, oxidation, reviews 7823.
catabolism, pathway evolution, enzymes activity, reviews 7821.
cell adhesion, bioassays, comparison 7615.
cell adhesion, comparison, penetration, cell culture monolayers, detection methodology 5898.
cell culture, antibiotic sensitivity testing standardization 1380.
cell culture, enumeration methodology 5056.
cell culture growth, enumeration methodology 4193.
cell disruption methodology, proteins extraction 1593.
cellulase production, screening products 6863.
cellulose biosynthesis, reviews 4393.
cerebrospinal fluid, detection methodology 2486.
chlorobenzene, biodegradation, isolation, metabolism, characterization 2718.
chromosomes, genetics, computer programs 5069.
classification, food-borne diseases, reviews 1896.
cleaning systems, floors, nosocomial environments, disinfection 7544.
clinical isolates, antibacterial activity, ceftazidime, cephalosporins 6509.
clinical isolates, antibiotic resistance, nosocomial environments 3994.
clinical isolates, antibiotic sensitivity testing, ticarcillin + clavulanic acid, disc-diffusion test 5774.
clinical isolates, disc-diffusion test, antibiotic sensitivity testing, cephalosporins 4819.
clinical isolates, Ethiopia, hospitals, blood culture, antibiotic sensitivity testing 7400.
clinical isolates identification, reviews 8467.
clinical isolates, mercury, resistance, detoxification, reviews 9071.
clinical isolates, pathogenicity, immunoglobulin A proteinase production, methodology 1575.
clinical isolates, urinary tract infection, antibiotic sensitivity testing, amoxicillin + clavulanic acid 6525.
cocoa fermentation 5323.
colonization, carbon (activated) granules, drinking water treatment 553.
colonization, roots, Zea mays, interspecific relationships, bioassays 4639.
colonization, titanium surfaces, rivers water exposure 3650.
communities, chlorophenol biodegradation 182.
contamination BACTEC test, blood culture, false-positives, clinical microbiology

Bacteria, (continued)

704.
contamination, blood culture, comparison, pathogens growth 3352.
contamination, cheese brines, filtration removal 192.
contamination, cleaning systems, milk storage tanks 1505.
contamination, drinking water 2404.
contamination, enumeration methodology, hemodialysis systems 1638.
contamination, food processing, meat industry 3706.
contamination, hygiene, poultry, meat industry, food processing 3707.
contamination incidence, cerebrospinal fluid specimens, meningitis false-positives, man 4785.
contamination, measuring techniques, comparison, methodology 7575.
contamination, meat reprocessing, poultry 2738.
contamination, milk, measuring techniques, factors affecting, reviews 1897.
contamination, raw materials use production contamination 8342.
contamination, sausages 1908.
contamination, single-cell protein, continuous culture, yeasts 1707.
contamination, spoilage, cured products, meat products, food processing 3708.
contamination, spoilage, sampling, methodology, meat 3715.
contamination, swimming pools, association hair microflora 2405.
contamination, turkeys carcasses, cleaning systems, meat industry 1053.
contamination, viruses isolation cell culture, prophylaxis, use, penicillin, comparison, vancomycin 1557.
content, milk, goats 6973.
continuous culture 6778.
continuous culture, dissolved oxygen coefficients, determination methodology 668.
conversion, organic matter, wastes, biomass, methodology, books 6793.
cooling towers, ozone bactericidal activity 5851.
corrosion, pipes, air conditioning 4677.
counting methods, glucose metabolism, food contamination 6177.
counting techniques, liquid culture 2450.
cryopreservation, methodology, reviews 744.
culture collections, plasmids, genetic markers, computer programs 756.
culture preservation, methodology 4188.
cyanide, resistance, correlation, cytochromes, respiration (cyanide insensitive) 9045.
2,4-D biodegradation, polysaccharides soil amendment stimulation 6389.
2,4-D biodegradation, soil amendment organic compounds, stimulation 6391.
decomposition, leaf litter, reservoirs, pollution effects, mines acids drainage 4423.
denitrification, soil, association, *Fagus sylvatica* 2991.
denitrification, waste water, association, aeration 1466.
dental caries, fluoridation, children 8431.
dental caries, fluoridation effects on epidemiology, British Isles, children 7545.
dental caries, prophylaxis, fluoride, drinking water, man, France 5868.
dental plaque, antibiotic sensitivity testing 5753.
desalination plants, microbiology, physicochemical properties, water quality 4942.
detection, Bactec test, comparison, lysis centrifugation, man 3313.
detection, beer spoilage, fermentation 6940.
detection, bioluminescence, man 6787.
detection, blood culture methodology 1663.
detection, hydrogen peroxide production, 2,2'-azino-di(3-ethyl benzthiazoline-6-sulfonic acid)+horseradish peroxidase media 5900.
detection methodology, β -lactamase production relationship 3286.
detection methodology, diarrhea, man 5921.
detection methodology, oxidative association 1580.
detection, milk, methodology, reviews 207.
dextranase, isolation, characterization 5138.
2,4-dichloroaniline biodegradation 6947.
disc-diffusion test, antibiotic sensitivity testing, standardization, quality control 8348.
disc-diffusion test, formicin A 831.
disc-diffusion test, use, Mueller-Hinton agar 3077.
disease resistance, plant breeding, Glycine max 5473.
disease resistance plant breeding, Sorghum 8897.
disinfectants, wastewater treatment, chlorine, residues 4938.
disinfection, drinking water distribution systems 8416.
disinfection, sterilization, reviews 2236.
disintegration methodology, enzymes, proteins, isolation 4303.
dispersion, sprays irrigation, waste water 9250.
dissolved oxygen diffusion, mathematical models, activated sludge 9239.
DNA base composition, methodology 3298.
DNA, flow cytometry methodology 3287.
DNA, thymidine, incorporation, measuring techniques 5907.
drug resistance, folic acid biosynthesis pathway inhibitors, reviews 9053.
drug resistance, genetic control, books, conferences 3389.
drug resistance, plasmids, clinical aspects 3995.
drug resistance plasmids incidence, *Salmo gairdneri* isolates 9072.
drug resistance, reviews 9069.
drug sensitivity testing, media (culture), methodology 7629.
electron transport coupling, fuels cells, redox potential mediators 6099.
electron transport coupling, fuels cells, redox potential mediators 6101.
encardiasis, man, antibiotics prophylaxis, dental plaque antibiotic sensitivity testing 2252.
endotoxins, Limulus lysate test 1958.
endotoxins, Limulus lysate test, reviews 4490.
energy requirements, nutrient requirements, association, monomers biosynthesis, excretion, mathematical models 6512.
enhancement, oil, recovery, reviews 3004.
enumeration, abattoirs, counting methods 4202.
enumeration, automated methods, electrical impedance, milk 5315.
enumeration, forests soil, environmental factors effects on 1231.
enumeration, laundry washing, hospitals 3226.
enumeration, membrane filtration, staining 9329.
enumeration methodology 6766.
enumeration methodology, ATP measurements, meat contamination 3304.
enumeration methodology, meat, freezing 1060.
enumeration methodology, ultrasound, separation techniques, sediments 9305.
enumeration, most probable number, computer applications 4209.
enzymes, dimethyl 3-benzoyloxycarbonylaminoacetic acid hydrolysis, stereoselectivity, production, precursors, carbanions, negamycin 2308.
enzymes, racemization, synthesis, L-lysine, L-cysteine 4.
ethanol, fermentation, monitoring, methodology 994.
ethanol production, biotechnology, books 4234.

Bacteria, (continued)

- ethanol production, biotechnology, books, conferences 5943.
ethidium bromide fluorescence staining, blood samples 5044.
Eucalyptus, heartwood 364.
extracellular polymers, polysaccharides, staining 5060.
extracts 8433.
extracts, antibiotics determination, electrochemistry methodology 3277.
extracts, detection, pentoxifylline metabolites, thin-layer chromatography, high-performance liquid chromatography 8433.
fatty acids, esters, biochemical analysis, methodology 3270.
fermentation, ethanol production 6937.
fermentation, growth conditions 852.
fermentation, *Hordeum vulgare* straw, pretreatment, use, alkalis, cellulase, effects on 1045.
fertilization effects on, soil, catchment areas, surface water, forests 2106.
films, air conditioning water, industries 5849.
films, organic compounds pollution biodegradation, ground water 8690.
films removal, surfaces, glycol-bis(8-aminoethyl ether)-N,N-tetraacetic acid effects on 417.
flagella, staining, methodology 1576.
floculation, activated sludge, characterization 4119.
floculation, extracellular polymers production, activated sludge settlement, role, nutrient balance 2332.
fluorescence, cytology, effects on, *Fusarium oxysporum* f.sp.cuccumerinum, chlamydospores, spore germination, soil 8227.
fluorometry, measuring techniques, proteins, amines, biotechnology 7556.
food contamination, food processing, chlorine dioxide, antibacterial activity, poultry 7020.
food contamination, ham, potassium sorbate, vacuum packaging, effects on food spoilage 3730.
food contamination, meat products quality, amines detection 6196.
food contamination, minced meat 203.
food contamination, seafood, Pisces 8712.
food contamination, tomatoes, food processing effects on 6984.
food poisoning, toxins, inactivation, cooking temperature, stuffing, poultry 5349.
food sources, feeding, *Aphelechnus aeneae* 7263.
L-form, artificial symbiosis, plants 6345.
fouling organisms, sensitivity standardization, agar diffusion test 537.
fouling organisms, species composition, marine environment 1040.
free-living, nitrogen cycle measurements, Sorghum seedlings 8967.
fuel cells, electron transfer, redox potential mediators 5243.
fuel cells, electron transfer, respiration rates, redox potential mediators 5242.
fungi disinfection, fishery products, feeds 5359.
gastrointestinal tract infection, pathogenesis, man, vaccines development, reviews 2325.
genetic engineering, fermentation, proteins, recovery, reviews 7812.
genetic engineering, release, marine environment, estuaries, role, biodegradation, chemical pollution 3681.
genetic engineering, viruses vaccines production 4075.
glucosaminophosphate isomerase (glutamine-forming), anticapsin, inhibition 8382.
glucose isomerase, production, characterization 2618.
growth, Bactec test, chemotherapy agents effects on, cancer patients 3319.
growth, blood culture, detection, bioluminescence, ATP 751.
growth kinetics, feedback inhibition, batch culture 5920.
growth, lipolysis, proteolysis, meat isolates 1059.
growth, luncheon meat contamination, nitrite association 2728.
growth, mathematical models, computer applications 4172.
growth, measuring techniques, use, electrical conductance meters 3311.
growth, meat, temperature range analysis 1061.
growth, spoilage, packaging, storage, light effects on, pork 4465.
2-haloacetaldehyde, lactic acid enantiomers production 8517.
host-pathogen interactions, host plants, genetic analysis, host specificity 8767.
host-pathogen interactions, plants, reviews 4497.
hosts adsorption, phages enumeration methodology, water 2408.
hydrocarbons, aromatic compounds, biodegradation, reviews 8278.
hydrogen production 3584.
hypersensitivity mutants, antibacterial activity, β -lactam antibiotics, use, antibiotic sensitivity testing 6496.
hypochlorous acid, chlorine dioxide, antibacterial activity, in vitro, models 8721.
ice nucleation, frost, plants 4556.
ice nucleation, plants 3781.
identification, activated sludge reactors, cutting fluids biodegradation 178.
identification, acyl type cell walls, use, glycolic acid assays, methodology 3299.
identification methodology, Autobac test use 788.
identification, odor perception 9287.
identification, urine culture, bacteriuria diagnosis 7594.
immobilized cells, methanogenesis, waste water, reactors 419.
immobilized cells, polymers supports 763.
immobilized enzymes, 12- α -hydroxy bile acids assays 23.
immunoassays, immunodiagnosis, meningitis, man 9292.
incidence, catheters, polytetrafluoroethylene, polyvinyl chloride 3222.
indicator species, comparison, enterovirus microbial pollution, swimming pools, Romania 2409.
indicator species, pollution monitoring, microbial pollution, coastal waters 2400.
indicator species, population levels, water temperature, rivers, estuaries 4131.
indicator species, public health, accumulation, filter feeders, *Gryphaea gasar* 3217.
indicator species water quality, abundance, Bivalvia 8424.
indigenous species, community structure, nutritional status, biomass, ground water 5817.
indigenous species, ground water, population levels, pollutants biodegradation, waste water infiltration 5813.
industrial strains, enzymes biosynthesis, regulation 2603.
infection, antibiotics treatment, man, books 2538.
infection, neonates, baths, washing, relationship, skin microflora, man 6729.
infectious diseases, diagnosis methodology, man 4191.
inhibition decay fungi, wound infection, *Picea abies* 7238.
inhibition, methanogenesis, digestion (anaerobic), methanogenic bacteria 9036.
inhibition, spore germination, conidia, *Bipolaris victorae*, soil fungistasis 8966.
inoculum, preparation standardization, inoculation methodology 1665.
inoculum, soil amendment, effects on yield, *Solanum tuberosum*, Zea mays 8201.

Bacteria, (continued)

- intestinal microflora, rats, ecosystem analysis, methodology 5787.
isolation, enzymes digestion, phloem, *Catharanthus roseus* 281.
isolation, identification, methodology 3231.
isolation, media (culture), identification, methodology, reviews 5055.
isolation methodology, penicillin amidase biosynthesis screening 33.
isolation methodology, phase λ lysogenization resistance 5910.
isolation, respiratory tract, antibiotic sensitivity testing 3088.
 β -lactam antibiotics antibiotic resistance, β -lactamase role 438.
 β -lactam antibiotics resistance, β -lactamase activity 4702.
 β -lactam antibiotics resistance, β -lactamase activity 4703.
 β -lactamase, antibiotic resistance, β -lactam antibiotics, reviews 9050.
 β -lactamase, moxalactam inactivation 5770.
 β -lactamase production, clinical isolates, colorimetry, cephalosporins 487.
leaves decomposition 5306.
levels, activity, soil, leaf litter, phenamibios, oxamyl, effects on 9025.
levels, association, chlorination, swimming pools, Australia 3220.
levels, association, chlorination, water treatment, reduction, trihalomethanes 3206.
levels, buildings biodegradation 2720.
lignin biodegradation 6152.
lignin biodegradation, protocatechuate 3,4-dioxygenase, catechol 1,2-dioxygenase 4443.
lignin biodegradation, reviews 7829.
lipopolysaccharides, purification 3537.
live, fluorescence staining, membrane potential, rhodamine 5025.
lytic enzymes biosynthesis 3481.
malachite green, staining, detection, sewage treatment 2331.
manganese, oxidation, reduction, valency, soil 6386.
manipulation, safety instruments, laboratories occupational hazards 5872.
mathematical models, growth 1530.
meat spoilage, role food poisoning 3713.
media (culture), cotrimoxazole, drug sensitivity testing 2217.
media (culture), hyaluronidase activity determination, turbidity methodology 3265.
media (culture), oxygen adsorption rates, aeration column, sewage treatment 3291.
media (culture), use, glycerophosphate, Tris 7579.
metabolism, fungi, tetrahydrofuran, reviews 7824.
metals resistance, methodology, drug sensitivity testing 3017.
metals tolerance, antibiotic resistance, drinking water isolates 6433.
methane production, animal wastes fermentation, kinetics, mathematical models 9033.
methanogenesis, landfills, waste treatment 1457.
microbial pollution, lakes, runoff, pollution monitoring, mathematical models 145.
microbiological activity, ozone, nosocomial environments 2411.
microbiology, contamination, meat, public health 4458.
microflora, antibiotic resistance, neonates, man 7332.
microflora, electrical stimulation, sodium chloride, sodium nitrite effects on, beer 6976.
microflora, man burn infection, antibiotic sensitivity testing 3084.
monosodium methaneaspartate, metabolism, conversion 1284.
morphology, media (culture), isolation, diagnosis, methodology 4187.
most probable number methodology, dilution relationship 1628.
nitrification, estuaries, measuring techniques, salinity, effects on 3338.
nitrogen containing aromatic compounds, biodegradation 1005.
nitrogen fixation, biochemical characteristics, regulation, nitrogenase, reviews 4656.
nitrogen fixation evolution, biosphere, paleoenvironments 2171.
nitrogen fixation, Leguminosae, interspecific relationships, books 5094.
nitrogen sources, carbon sources, bioassays, acetylene reduction, effects on 7614.
norfloxacin disc-diffusion test, bacteria, standardization 3047.
nosocomial infection, epidemiology, carpets, hospitals, man 581.
oil, association, railway tracks, stimulation, biodegradation, field trials 1305.
organic acids, salts, antimicrobial activity, silage 6489.
oxidase, growth, *Campylobacter* media (selective) 1654.
oxidation, molybdenum ore 9833.
pathogens, association, nuclear polyhedrosis virus propagation, biological control, *Lymantria dispar* 6907.
pathogens, inoculation, spraying, plant diseases 2771.
pathogens, microbial pollution, estuaries 6713.
pathogens, natural enemies, surveys, use, biological control, *Tipula paludosa* 2662.
pathogens, plant diseases, biological control, books 4231.
pathogens, plant diseases, identification 3779.
pathogens, plants, hormones, mediation, tumorigenesis 8656.
pathogens, surveys, use biological control, insects 4390.
P-CB biodegradation, reviews 7827.
peanuts lignin biodegradation 1777.
penicillin acylase like enzymes, kinetics, thermodynamics 4315.
penicillins, cephalosporins, biosynthesis pathway 491.
pentoses conversion, acetone, butanol, production 3598.
pesticides (organochlorine) biodegradation 1014.
pharmaceuticals testing, environmental factors, books, conferences 3388.
pharmaceuticals production, reviews 8651.
phenols, derivatives, physicochemical derivatives, antimicrobial activity 1353.
phony disease, xylem, *Prunus persica*, water potential 8879.
phospholipase C activity, soil 2947.
phosphorus cycle, soil, reviews 4626.
plant diseases, Australia 3769.
plant diseases, check lists, Brunei, books 7640.
plant diseases, conferences 7644.
plant diseases, diagnosis 9350.
plant diseases, diagnosis 3780.
plant diseases, diagnosis, books 4235.
plant diseases, disease resistance inducers 4571.
plant diseases, identification, phase typing 3770.
plant diseases, pathogenesis, reviews 4493.
plant diseases, research programs 1100.
plant diseases, Saudi Arabia 5399.
plant diseases, *Solanum tuberosum*, books 3380.
plant diseases, *Vicia faba*, books 4236.
plasmids, isolation, methodology 8479.
plasmids, pollutants biodegradation, genetic engineering, reviews 4435.

Bacteria, (continued)

- plasmids screening methodology 745.
pollutants biodegradation, ground water 5814.
pollution control, freshwater pollution, industrial wastes 4896.
polyethylene glycol, oxidation enzymes 7678.
polysaccharides, bioassays, enzymes 3528.
polysaccharides capsules, use vaccines, immunogenicity, reviews, man 3184.
polysaccharides, characterization 7763.
polysaccharides formation, straw decomposition 6051.
polysaccharides, industrial applications, biotechnology, reviews 8622.
polysaccharides, polysaccharase, characterization 2634.
population levels, rhizosphere, *Zea mays*, *Vigna unguiculata*, *Colosynthis vulgaris* 7264.
postoperative infection, plastics prophylaxis, man 4958.
production, ethane, ethylene, acetylene 8265.
production, insulin, interferon, gene transfer 3524.
production, vaccines, antisera, immune serum globulin, industrial applications 9218.
proteinase activity, spectroscopy methodology 4213.
proteins, separation techniques, downstream processing 1600.
proteolytic enzymes detection, activity, association, biodegradation, leather, parchment 8693.
proteolytic enzymes, detergents 47.
proteolytic enzymes, tanning, leather 48.
quantification, media (selective), cystic fibrosis sputum 7588.
radioreistance, dying, effects on 4718.
recovery, lysis centrifugation system, clinical trials 4159.
recovery methodology, kidney diseases, man 1633.
recovery, use, antimicrobial agents removal equipment, man 3228.
regeneration, carbon (activated), water treatment 7496.
regulatory mechanisms, enzymes, genetic control, industrial applications 851.
relationship, food, resistance, carbon dioxide 1923.
rhizoplane microorganisms, inoculation, inhibition, *Plasmodiophora brassicae* clubroot, *Raphanus sativus* 8867.
rhizoplane microorganisms, phosphorus, nitrogen, effects on, association Gramineae 6334.
rhizosphere microorganisms, *Triticum aestivum*, *Hordeum vulgare*, carbon, utilization, release 2930.
ring rot, disease resistance, *Solanum tuberosum* 4559.
RNA polymerase (DNA-dependent), rifandin effects on 8358.
RNA polymerase isolation, kinetics, substrate specificity 59.
role, biodegradation, pentachlorophenol, wastewater treatment 1035.
salt marshes, enumeration, methodology 4177.
sanitizers, antimicrobial agents, dentures 2420.
saprophytes, enumeration, methodology, water quality 6755.
sediments analysis, cooling towers 561.
separation, density gradients methodology, waste water populations 3269.
L-serine biosynthesis enhancement, L-serine analogues resistant mutant 1705.
sewage sludge, biodegradation, digestion (anaerobic), measuring techniques 4438.
sewage treatment, public health 2363.
siderophores assays, colorimetry, methodology, in vitro 661.
silage production 5350.
single-cell protein production, bagasse fermentation 1734.
skin microflora, counting methods, cattle 4138.
soaps contamination 8430.
soil isolates, soil azinphos-methyl biodegradation 4444.
soil microorganisms, distribution, USSR 3954.
soil microorganisms, mercury resistance, gene transfer, R factors 5717.
soil microorganisms, respiration, gas chromatography 400.
soil-borne diseases, plant diseases, biological control, suppressive soils 330.
solid wastes, disease transmission, *Rodentia*, *Diptera*, public health 2361.
spoil, disease control, mancozeb-cupric hydroxide, *Lycopodium esculentum* 6310.
spoilage, acidification effects on growth, textured soy protein, beef, minced meat 6987.
spoilage, beer 5327.
spoilage, contamination, meat, books 4242.
spoilage, corn, preservation, ammonia+propionic acid 7025.
spoilage, eggs, detection, automated methods, comparison organoleptic evaluation 1052.
spoilage, hydrogen sulfide, *Gadus morhua* 3689.
spoilage, meat 3711.
spoilage, meat, refrigeration 3712.
spoilage, milk, pasteurization, cold storage 1910.
spoilage, milk products 6964.
spoilage, proteolytic enzymes, milk, refrigeration, pasteurization, shelf life 6175.
spoilage, shelf life predictions, refrigeration, milk 6174.
spoilage, steam pasteurization, freezing, seafood, *Crassostrea virginica* 5364.
spoilage, wine, brandy 5279.
spores, heat resistance, food industry 7030.
spores, heat resistance, mechanisms, food industry 6415.
spores, inhibition, antimicrobial agents, food industry 7028.
spores, pathogens, aerosols, laminar air flow, safety cabinets 9262.
spores, resistance, hydrogen peroxide, food industry 6414.
sporidies, reviews 1323.
spot, *Kalanchoe blossfeldiana*, etiology 4555.
staining, phosphatase assays 8610.
staining, titanium chloride 5922.
starvation, survival, nutrient availability, soil isolates, clinical isolates, fresh water, lakes 9224.
substrate specificity, mixed culture 1598.
subtilisin, active sites serine residues, tryptophan residues distance, fluorescence 899.
sulfate reduction, monitoring, radioactive labelling, methodology 3346.
surfactants biodegradation, alcohol dehydrogenase, arylsulphatase 189.
survival, γ radiation treatment, food contamination 7031.
survival, industrial effluents, shales 4135.
survival, mathematical models, lagoons, wastewater treatment 1472.
survival, oil samples 9040.
symbionts, leaves, *Tozzia alpina* 8204.
synthetic vaccines, development methodology 9222.
tetrapyrroles biosynthesis, reviews 4380.
toxicity, cadmium, copper, soil amendment 4675.
transport properties, sandstone, apparatus methodology 423.
treatment, urinary tract infection, bacteria, man 2212.
ubiquinone, separation techniques, high-pressure liquid chromatography 1652.

Bacteria, (continued)

- urinary tract, antibacterial activity, norfloxacin, factors affecting drug resistance 6466.
- urinary tract, clinical isolates, susceptibility, desferrioxamine 4729.
- urinary tract infection, man, drugs treatment 2212.
- urinary tract microflora isolates, antibiotic sensitivity testing 6501.
- use, DNA recombination, methodology 841.
- use, wastewater treatment, waste water, toxicants, methodology 8399.
- vaccines production, veterinary medicine, reviews 5806.
- vertical distribution, indigenous species, ground water 5816.
- waste water, irrigation, crop fields, soil properties, characterization 4924.
- wastewater treatment, animal wastes effluents 7512.
- water isolates, biodegradation, isopropyl N-phenylcarbamate, 2,4-D 6945.
- water isolates, food, isolates, identification, assays, biochemical characteristics 2499.
- wetwood, association *Scolytus ventralis* attack, Abies 5585.
- wood, decomposition, *Pinus silvestris*, *Fagus silvatica* 7239.
- xenobiotics biodegradation, reviews 1011.
- xenobiotics biodegradation, reviews 1012.
- xylose isomerase, biotechnology, reviews 2597.
- xylose utilization 3534.
- Bacterial luciferase,**
immobilized enzymes, ATP levels, bioassays 8564.
- Bactericides,**
bactericidal activity, *Serratia marcescens*, hemocoel body fluids, *Glycera dibranchiata* 451.
- Bacterial control,** *Legionella pneumophila* contamination, cooling towers 7531.
- Bactericidal,**
antibiotic resistance, *Staphylococcus*, mechanisms, development 7329.
- Bacterins,**
vaccines, *Renibacterium salmoninarum* kidney diseases, *Salmo gairdneri* 6662.
- Bacteriochlorophyll,**
attraction methodology, phototrophic bacteria 9318.
- Bacteriochlorophyll a,**
Chromatium vinosum, preparation 2670.
- precursors, 2-(1-hydroxyethyl)-2-desvinyl chlorophyllide a, isolation, characterization, *Rhodospseudomonas sphaeroides* 6893.
- Bacteriochlorophyll c,**
structure, high-performance liquid chromatography methodology, *Prosthecochloris aestuarii* 5615.
- Bacteriocin typing,**
methodology, *Streptococcus pyogenes* identification 9307.
- Streptococcus* group A, identification, methodology 7616.
- Bacteriocinogeny,**
Brevibacterium linens, *Brevibacterium maris*, *Corynebacterium medolanum*, *Micrococcus roseus* 6550.
- tetracycline antibiotic resistance relationship, *Clostridium perfringens* 4707.
- Bacteriolsins,**
adsorption, bactericidal activity, *Streptococcus mutans* 4882.
- association, membranes, molecular weight, *Bacteroides uniformis* 5793.
- Bacillus stearothermophilus*, antibacterial activity mechanisms 3127.
- Bacteroides fragilis*, purification, characterization 3143.
- Corynebacterium glutamicum*, biosynthesis, physicochemical properties 9200.
- lactacin B, purification, characterization, *Lactobacillus acidophilus* 9203.
- production, *Pseudomonas solanacearum*, avirulent strains, biological control, wilt, *Nicotiana tabacum* 8113.
- Streptococcus cremoris*, antibacterial activity, role dairy starters 2311.
- Yersinia intermedia*, antibacterial activity, physicochemical properties 522.
- Bacterioplankton,**
samplers, water stratification, marine environment 1611.
- Bacteriorhodopsin,**
pigments, C.D., purple membranes, *Halobacterium halobium* 4257.
- Bacteriostasis,**
lauryl pyridinium iodide, adsorption, *Escherichia coli* 2218.
- Bacteriostats,**
antibacterial activity, methodology 1526.
- deltolins, effects on cell membranes, *Micrococcus lysodeikticus* 7355.
- dioxolins, effects on cell membranes, *Staphylococcus aureus*, *Micrococcus lysodeikticus* 8306.
- sodium azide, immunoperoxidase test, effects on 3052.
- Bacteriuria,**
aerobic bacteria, diagnosis, antibiotic sensitivity testing, electrochemistry, dissolved oxygen levels 8345.
- detection, automated methods, urine screening 3339.
- detection equipment, characterization 3264.
- detection, leukocytes esterase activity 731.
- detection, urine, automated methods 726.
- diagnosis, lasers nephelometry, man 5040.
- diagnosis, urine culture, bacteria identification 7594.
- diagnosis, urine preservatives, media (transport) 1608.
- diagnosis, urine screening, man 1642.
- disipal test, detection 7574.
- Escherichia coli* isolates, identification methodology, drug sensitivity testing 2464.
- urine screening, automated methods 7577.
- urine screening, automated methods, clinical microbiology 690.
- urine, screening methodology 750.
- urine screening projects, Autobac test, staining 6784.
- Bacteroidaceae,**
septicemia detection, liquid culture methodology, man 2466.
- Bacteroides,**
antibacterial activity, antibiotic synergism, cefsulodin, +sulbactam, +cefotaxim, +cefotaxime 6512.
- antibacterial activity, cefpiramide, apalcillin 3101.
- antibacterial activity, fludalanine +pentazidone 6454.
- antibiotic FCE 22101 antibacterial activity 1431.
- antibiotic resistance, antibiotic sensitivity testing, plasmids transfer, reviews 7335.
- antibiotic sensitivity testing, moxalactam 6514.
- antibiotic sensitivity testing, penicillin G, β -lactam antibiotics 9159.
- cephalosporins antibacterial activity 9185.
- clindamycin antibiotic resistance, detection 3014.
- fermentation, hemicelluloses, energy resources 6156.
- identification, U.V. radiation fluorescence 1617.
- identification, biochemical characteristics 2505.
- mucopolysaccharidase, purification, characterization 97.

Bacteroides, (continued)

- penicillin, antibiotic resistance, β -lactamase production, oral cavity, clinical isolates 7334.
- phenylacetic acid biosynthesis 855.
- vancomycin antibacterial activity, use, media (selective) 3125.
- Bacteroides cellulosoivans,**
cellulase 7740.
- Bacteroides fragilis,**
antibacterial activity, bicyclomycin 3164.
- antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 6465.
- antibacterial activity, pirimycin 6543.
- antibacterial activity, 7 α -methoxy cephalosporins, comparison, 7 β -methoxyminoacetamido cephalosporins 3096.
- antibiotic resistance, cephalosporins, clavulanic acid inhibition β -lactamase 3019.
- antibiotic resistance, clindamycin, clinical isolates 7318.
- antibiotic RU 28965, antibacterial activity 4878.
- antibiotic sensitivity testing, β -lactamase activity 7407.
- antibiotic sensitivity testing, ampicillin, carbenicillin, mezlocillin, azlocillin, piperacillin, clavulanic acid effects on 9164.
- antigens detection, enzyme-linked immunosorbent assay, urine, experimental infection, rats 6772.
- antigens, enzyme-linked immunosorbent assay detection, urine, man 7604.
- bacteriocins purification, characterization 3143.
- capsules, lipopolysaccharides, polysaccharides, fatty acid composition 6887.
- cefotaxim antibiotic resistance 1309.
- clavulanic acid effects on β -lactam antibiotics antibacterial activity 6499.
- clindamycin antibiotic resistance, detection 3014.
- clinical isolates, antibacterial activity, cotrimoxazole 8301.
- clinical isolates, antibiotic sensitivity testing, antibiotic resistance, surveys 7348.
- clinical isolates, antimicrobial agents, bacteriostasis, bactericidal activity 7402.
- clinical isolates, metronidazole, antibiotic resistance 8291.
- clinical isolates, moxalactam, antibacterial activity 5768.
- DNA biosynthesis, metronidazole inhibition, bactericidal activity 2213.
- drug sensitivity testing, inoculum preparations 1334.
- gentamicin antibacterial activity 4851.
- gentamicin, antibiotic synergism, penicillin, clindamycin, metronidazole 3118.
- indicator species, membrane filtration, media (isolation), water 4936.
- infection, man, epidemiology, β -lactam antibiotics, antibiotics sensitivity testing 7409.
- β -lactamase, cefotaxim stability 1394.
- β -lactamase, purification, characterization 879.
- media (selective), isolation, identification 3355.
- mixed culture, *Escherichia coli*, aztreonam cefotaxime 9182.
- pH, inoculation, effects on, ciprofloxacin, antibacterial activity 4733.
- Bacteroides livii,**
3-ketodihydrosphingosine synthetase, L-cycloserine inhibition 7472.
- Bacteroides melaninogenicus,**
gentamicin antibacterial activity 4851.
- antibiotic, antibiotic synergism, penicillin, clindamycin, metronidazole 3118.
- protection, penicillin antibacterial activity, role, facultative bacteria β -lactamase production 5775.
- Bacteroides melaninogenicus subsp. intermedius,**
identification, U.V. radiation fluorescence 1617.
- Bacteroides melaninogenicus subsp. melaninogenicus,**
identification, U.V. radiation fluorescence 1617.
- Bacteroides nodosus,**
drug sensitivity testing 3056.
- pili, immunochemistry, labeling methodology 7624.
- pili, proteins, agglutination, absorption, bioassays, methodology 678.
- pili, vaccines, sheep, purification, characterization, immunogenicity 3185.
- proteases, thermal stability, characterization 7757.
- Bacteroides succinogenes,**
endo-1,4- β -D-glucanase activity 3517.
- Bacteroides thelatoamicon,**
protein biosynthesis inhibition, galactosamine role 1820.
- Bacteroides uniformis,**
bacteriocins, association, membranes, molecular weight 5793.
- Bacteroides vulgatus,**
mixed culture, *Escherichia coli*, antibacterial activity, aztreonam cefotaxime 9182.
- Bacteroids,**
Bradyrhizobium japonicum, denitrification pathway, in vitro 8995.
- metabolites uptake, *Bradyrhizobium japonicum* 6385.
- plasma membranes, *Rhizobium*, role nitrogen fixation, nodules, Leguminosae 2976.
- Rhizobium*, carbohydrates, organic acids, metabolism, nodules, reviews, Leguminosae 2975.
- Rhizobium japonicum*, poly- β -hydroxybutyrate, high-pressure liquid chromatography, characterization 1653.
- Rhizobium*, nitrogenase, acetylene reduction, oxygen effects on, nodules, *Vigna unguiculata*, *Arachis hypogaea* 7291.
- Baculovirus,**
biological control, *Adoxophyes orana* 2642.
- biological control, pathogenicity, infectivity, nontarget organisms, *Palaemonetes vulgaris* 6921.
- Baeocystin,**
isolation, high-performance liquid chromatography, alkaloids, *Psilocybe* 3751.
- Beifomycin,**
Streptomyces griseus biosynthesis, isolation, structure, antibacterial activity, antifungal activity 4873.
- structure, *Streptomyces griseus* subsp. *sulphureus* 8372.
- Bagasse,**
carriers, *Rhizobium inoculum*, cold storage, yield, *Vigna unguiculata* 2982.
- cellulolytic enzyme production, *Trichoderma* 8023.
- fermentation, bacteria single-cell protein production 1734.
- hemicelluloses, sodium hydroxide hydrolysis, production, xylose isomerase, endo-1,3- β -D-xylanase, *Streptomyces flavogriseus* 5186.
- hydrolyses, hemicelluloses, carbohydrate composition, sugars, amino acid composition, use, carbon sources, fermentation 8677.
- hydrolysis, mathematical models, media (culture), single-cell protein production, cellulolytic bacteria 4353.
- hydrolysis, sugars production, *Trichoderma reesei* cellulase 1808.
- microwave radiation pretreatment, cellulose, *Trichoderma viride* 5128.

Bagasse, (continued)

ozone pretreatment effects on biodegradation 1880.
 pretreatment, sodium hydroxide, biodegradation, single-cell protein production, *Chaetomium cellulosilyticum* 1715.
Saccharum officinale, *Aspergillus fumigatus* biodegradation, enzymes role 186.

Bakery products,

dough fermentation, microorganisms 5326.
 yeasts microflora, USSR 191.

Baking,

by-products, extracts, *Saccharomyces cerevisiae* 201.
 heat penetration, survival, microorganisms, bread 6986.
 industries, flour, starch hydrolysis, α -amylase, fungi 198.

Banana mosaic virus,

disease transmission, vectors, *Aphis gossypii*, *Musa textilis* 6276.

Bangladesh,

Enterobacteriaceae, antibiotic resistance, rivers, ponds 4133.

Barbarea vulgaris,

host range, *Spiroplasma citri* 4557.

Bark,

Broussonetia kazinoki, retting, pectinolytic enzymes, *Erwinia carotovora* 7680.
 composting, solid wastes, agricultural wastes 4099.
 composting, starter cultures, competition, thermophilic microorganisms 4103.
Eucalyptus marginata, water content, relationship *Phytophthora cinnamomi* infection 358.
 infection, *Endothia aggregata* sp. nov., *Pinus cantoria* 8185.
 Inga, Ilex, Mallostus, Robinia, *Cynometra*, nitrogen-fixing bacteria activity 8147.
Mallostus japonicus, Ilex pedunculosa, nitrogen-fixing bacteria activity, heterotrophic pressure, oxygen, effects on 8148.
Malus pumila, distribution, tomato ringspot virus 7994.
 meliponine, teleanthine, 6-methoxy teleanthine, antifungal activity, *Cladosporium cucumerinum*, antibacterial activity, *Bacillus subtilis* 4738.
 nitrogen-fixing bacteria, nitrogen fixation, *Bruguiera gymnorhiza* 2098.
 phenols, levels, *Nectria coccinea* var. *lignata*, host-pathogen interactions, *Fagus sylvatica* 8188.
 Populus, necrosis, *Xanthomonas campestris* pv. *populi* 8171.
Teclea trichocarpa, meliponine, teleanthine, 6-methoxy teleanthine, antifungal activity, *Cladosporium cucumerinum*, antibacterial activity, *Bacillus subtilis* 4738.

Barley,

contamination, mycotoxins 1082.
 contamination, ochratoxin A, citrinin, production, *Aspergillus ochraceus*, *Penicillium virdicatum* 5375.
 fungi mycelia penetration 1080.
Fusarium zeae infection incident 1079.

Barley stripe mosaic virus,

detection, localization, *Triticum aestivum* infected cells, immunochemistry methodology 4522.
 infection, alcohol dehydrogenase *Ash1* gene mutation, nucleotide sequence, *Zea mays* 7152.
 infection, seeds, *Hordeum vulgare*, effects on, yield 4516.
 virulence, *Avena faba* 6241.

Barley yellow dwarf virus,

corn hosts intermediates, association Gramineae infection 1996.
 detection, enzyme-linked immunosorbent assay, Gramineae 8802.
 disease resistance, *Avena* 5414.
 disease resistance, inheritance, plant breeding, *Avena sativa* × *Avena sterilis*

Hordeum vulgare, effects on disease resistance, *Pyrenophora teres* net blotch, *Rhynchospora secalis* leaf blotch 1196.
 incidence, relationship planting density, *Hordeum vulgare*, crop fields 256.
 infection, Agropyron, disease resistance, genetic control 8089.
 infection, *Avena byzantina*, double-stranded RNA 260.
 infection, Gramineae, Aphididae interaction 1989.
 infection, *Hordeum vulgare*, pathology, Hungary 7949.
 inoculation, dose-response effects, *Hordeum vulgare*, *Triticum aestivum*, *Avena sativa* 8783.
 monoclonal antibodies, hybridoma, characterization 5892.
 plant diseases, *Zea mays*, susceptibility 4513.

Barley yellow mosaic virus,

disease resistance, plant breeding, *Hordeum vulgare* 4569.
Base composition,

bacteria DNA, methodology 3298.

Bases,

treatment, effects on hydrophobicity, ultrastructure, endotoxins, *Salmonella minnesota* 4476.

Basidiobolus,

antifungal activity, amphotericin B, miconazole, ketoconazole, 5-fluorocytosine, potassium iodide 7380.

Basidiomycetes,

biodegradation, coconut fibers, Ascomycetes, Deuteromycetes, effects on 1031.
 biological control, *Trichoderma voltis* 7245.
 composts, heat production, mathematical models 4463.
 culture, books 3369.
 culture, composts, fermentation 8706.
 culture, fruit bodies production, infestation, pest control 7855.
 culture, fruit bodies production, infestation, Phoridae, Scaridae, Nematoda 7854.
 culture, fruit bodies production, volatiles, fumes effects on 7845.
 culture, fruit bodies yield, compost 1680.
 culture, thermophilic microorganisms, composts 1681.
 culture, use, digestion (anaerobic), industrial wastes, methanogenesis 8404.
 decay fungi, biodegradation, insulation foams, buildings 7243.
 decay fungi, wood, *Salix nigra*, *Populus deltoides* 8197.
 ectomycorrhizas, fruit bodies, basidiospores, inoculum, colonization, seedlings, *Betula pendula* 5559.
 ectomycorrhizas, leaves, *Tozzia alpina* 8204.
 ectomycorrhizas, *Pinus sylvestris*, *Betula pubescens*, Finland 2102.
 fermentation, fractionation, straw 155.
 fruit bodies, extracts, antifungal activity 9201.
 infection, effects on water conductivity, *Pinus ponderosa* 8194.
 infection, seedlings, cold storage, *Picea abies* 8175.
 invasiveness, *Megaselia haterata*, pest control 8109.
 lignin biodegradation, reviews 7829.
 monophenol monooxygenase detection, methodology 4217.
 monophenol monooxygenase, hydroxylation 2,4-dihydroxyphenylethylamine, 2,4-dihydroxyphenylalanine 890.

Basidiomycetes, (continued)

monophenol monooxygenase, tyrosine hydroxylation, role superoxide 2594.
 morphologies, ecological distribution, Arctic, alpine environments, conferences 2546.
 nutritive value, characterization 8700.
 plant diseases, *Zea mays*, *Arachis hypogaea*, *Glycine max*, *Phaseolus vulgaris*, pathogenesis 1111.
 pretreatment, *Triticum aestivum* straw, lignin biodegradation 1009.
 production, books 4455.
 production, proteolytic enzymes, renin 6829.
 saprophytes, phosphatase, comparison ectomycorrhizas, phosphate, nutrient uptake *Betula pubescens*, *Pinus contorta* 5575.
 sodium levels 5341.
 white rot, lignin biodegradation, lignocelluloses fermentation, optimization, straw, *Triticum aestivum* 1887.

Basidiospores,

Coniarium flaccidum, spore germination, fluorescence brighteners effects on 2529.
 cryopreservation, *Agaricus brunneus* 8696.
 dispersion, analysis, methodology 7630.
 fruit bodies, inoculum, ectomycorrhizas, colonization, seedlings, *Betula pendula* 5559.
 Heterobasidium anomum, deposition, airdrops, epidemiology, forests, *Tsuga heterophylla* 6944.

Batch culture,

cell culture, mathematical models, *Saccharomyces cerevisiae* 8503.
 cell hydrolysis, cellulase 8537.
 Escherichia coli, fluorescence, measuring techniques, growth rate 8475.
 Escherichia coli, glucose feeding, electrodes monitoring 676.
 ethanol production, immobilized cells, yeasts 3619.
 ethanol production, noise filters, computer applications, growth, yeasts 3630.
 feedback inhibition, growth kinetics, bacteria 5920.
 fermentation, computer applications monitoring, methanol addition, *Pseudomonas* 8633.
 fermentation, models, kinetics 3631.
 glucose fermentation, ethanol production, *Zymomonas mobilis* 3602.
 glucose fermentation, production, acetone, butanol, *Clostridium acetobutylicum* 4383.
Kluyveromyces fragilis, inulinase, association, β -D-galactosidase, production 7745.
 media (culture), inoculum production, *Rhizobium leguminosarum* var. *phaseoli* 5058.
 methodology, microorganisms, ecological evaluation, laboratories, reviews 4974.
 Nitrobacter growth, continuous culture comparison, soil isolates 9016.
 nutrient concentrations, association, fermentation, cellulose, *Clostridium thermocellum* 4443.
 photosynthesis, energetics, phototrophic bacteria 9304.
 polysaccharides, production, *Alcaligenes faecalis* 2629.
 productivity comparison, continuous culture, *Candida brassii* 5104.
 wood biodegradation, energy resources, digestion (anaerobic), microorganisms 3655.
 xylose isomerase production, *Arthrobacter globiformis* 6870.

Bathrooms,

trains, airborne microorganisms analysis 579.

Baths,

contamination, *Pseudomonas aeruginosa*, skin infection, man 566.
 neonates, relationship, skin microflora, bacteria infection, man 6729.
 spas, folliculitis, *Pseudomonas aeruginosa*, case reports, man 7530.
 water, measuring techniques, heat production, adiabatic fermentation 5271.

Bay N 7133,

drug sensitivity testing, *Candida albicans* 5741.

BCG,

purification, cytoskeleton, *Mycobacterium bovis* 3542.
 vaccines, characterization 8387.
 vaccines production, colonial characteristics 4079.

Beaches,

microbial pollution, enterovirus, indicator species, seasonal variations 6708.

Bean common mosaic virus,

nitrogen, effects on, *Vigna radiata*, biomass, yield, growth 4511.

Bean golden mosaic virus,

+ tobacco mosaic virus, mixed infection, *Phaseolus vulgaris*, pathogenesis 244.

Bean pod mottle virus,

disease transmission, *Ceratotoma trifurcata*, population density, *Glycine max* 243.
 infection, *Glycine max*, effects on *Bradyrhizobium japonicum* nodulation, nitrogen fixation 7140.

Bean yellow mosaic virus,

disease resistance, cultivars, *Phaseolus vulgaris* 1208.
 disease resistance plant breeding screening projects, *Vicia faba* 3873.
 disease spread, *Vicia faba*, epidemiology, vectors, Aphididae 5405.
 enzyme-linked immunosorbent assay detection 7927.
 infection, detection, use, electrophoresis, *Iris* 8816.
 infection, inhibition, reproduction, yield, *Vicia faba* 7938.
 infection, Trifolium, host range, field trials 1113.
 infection, Trifolium hybridum germplasm 1112.
 plant diseases, *Pisum sativum*, amino acid composition 6227.

Beans,

cacao, fungi contamination, ionizing radiation antifungal activity 4568.
 canned food, spoilage, gas production, *Bacillus stearothermophilus* 6988.
 fermented food production, role, lactic acid bacteria 211.
Glycine max, juices, sugars fermentation, *Lactobacillus cellobiosus* 6980.
 juices, *Glycine max*, sugars fermentation, lactic acid, *Lactobacillus cellobiosus* 5316.
Phaseolus vulgaris, *Lactobacillus cellobiosus* fermentation, mannitol biodegradation, *Lactobacillus plantarum* 7003.
Vicia faba, aflatoxins contamination, Egypt 7085.

Beauveria basiana,

beauvericin biosynthesis, cell-free system 3132.
 biological control, host plants effects on susceptibility, *Leptinotarsa decemlineata* 2651.
 biological control, larvae, *Indarbela quadrinotata* 6081.
 biological control, *Oryzaephilus surinamensis* 3574.
 biological control, soil colonization, disease reservoirs, *Curculio caryae* 5263.
 conidia pathogenicity, replication, relative humidity effects on, biological control, *Blissus leucopis* 7766.
 conidia subculture effects on pathogenicity, biological control, *Galleria mellonella* 2655.
 inoculum survival, soil, pest control, pupae, *Leptinotarsa decemlineata* 5213.

Beauveria bassiana, (continued)

spores survival, fungicides effects on, biological control, *Leptinotarsa decemlineata* 2647.

Beauveria felina,

oxirapentyn, isolation, structure 2310.

Biosynthesis,

biocynthesis, cell-free system, *Beauveria bassiana* 3132.

biocynthesis, *Paecilomyces fumosus-roseus* 8379.

Beer,

Bacillus subtilis spores, recovery methodology 6965.

combed beef, canned food, *Staphylococcus aureus* contamination, growth 6180.

electrical stimulation, sodium chloride, sodium nitrite effects on bacteria 6976.

extracts, ferric chloride flocculation, poliovirus 1 recovery 4990.

hot-boning, temperature effects on growth, *Escherichia coli*, *Salmonella typhimurium* 6959.

minced meat, textured soy protein, acidification effects on bacteria growth, spoilage 6987.

refrigeration, *Salmonella* survival, antibiotic resistance 7005.

spoilage, *Staphylococcus aureus*, *Salmonella* hadar, *Salmonella typhimurium*, freeze-thawing storage effects on 6975.

sulfur containing simulated flavor compounds volatiles, chemical composition, *Saccharomyces cerevisiae* 1046.

temperature, effects on, *Clostridium perfringens*, *Staphylococcus aureus*, growth 7029.

Beer,

brewing, wort fermentation, yeasts 984.

2,3-butanedione, 2,3-pentanedione, flavor compounds, isoleucine-valine operon, cloning, *Saccharomyces cerevisiae* 7797.

ethanol, fermentation, yeasts 5327.

fermentation, antifungal agents effects on bitterness compounds formation, yeasts 3587.

fermentation, histamine levels 6131.

fermentation, organoleptic evaluation, fermenters, yeasts 6932.

fermentation, use, yeasts immobilization 8670.

fermentation, wort addition, flavor, yeasts 2691.

flavor, yeasts effects on 2683.

maturation, yeasts brewing, use, *Lactobacillus casei* acetolactate decarboxylase 7800.

microorganisms contamination, reviews 8147.

spoilage, bacteria detection, fermentation 6940.

spoilage, bacteria, media (isolation) 4192.

spoilage, lactic acid bacteria 1872.

spoilage, *Lactobacillus brevis*, detection, media (isolation) 4414.

wort fermentation, phenyl carbonic acids, production, temperature effects on 2682.

Beet curly top virus,

purification, *Capsella bursa-pastoris*, methodology, isolation, monomers, dimers, characterization 3241.

Beet mosaic virus,

plant diseases, *Beta vulgaris*, etiology, Albania 6258.

Beet western yellows virus,

antigenic relationship, tomato yellow top virus, potato leaf roll virus, infection, *Lycopersicon esculentum*, *Solanum tuberosum* 8847.

infection, tubers, *Solanum tuberosum* 8031.

isolates, RNA characterization, *Capsella bursa-pastoris* 8668.

plant diseases, *Beta vulgaris*, *Lactuca sativa*, *Brassica*, Israel 4539.

Begonia acoetram,

powdery mildew, etiology 5464.

Belljarinka,

soil, Trinidad, Tobago 8359.

Belgium,

Lilium, leafy gall, etiology, *Corynebacterium fascians* 4531.

Betraniella humicola,

spot, *Punica granatum* fruits, new records 2002.

Bemisia tabaci,

disease transmission, tomato leaf curl virus infection, *Lycopersicon esculentum*, association, environmental factors 8022.

disease transmission, watermelon mosaic virus 2, squash mosaic virus, epidemiology, *Cucumis melo*, *Cucurbita pepo*, USA, California 3821.

squash leaf curl virus vector-borne diseases, characterization, disease transmission, *Cucurbita* 1150.

vectors, disease transmission, cowpea mosaic virus, infectivity, *Vigna unguiculata* 3784.

vectors, population density, seasonal variations, cowpea mosaic virus, *Vigna unguiculata*, *Phaseolus lunatus* 3783.

Beniate,

antifungal activity, *Macrophoma mangifera* 4587.

Bendani,

disease control, brown rust, fertilizer applications, yield, *Hordeum vulgare* 2900.

Benomyl,

antifungal activity, fuels, biodegradation, *Cladosporium resinae* 1298.

antifungal activity, sensitivity, isolates variability, *Rhizoctonia solani* 8117.

cross-resistance, *Penicillium digitatum*, green mold, post-harvest decay 2200.

disease control, *Ascochyta blight*, disease transmission, *Cicer arietinum*, seedlings 1969.

disease control, *Botryospheria dothidea*, *Botryospheria ribis*, wound infection, pruning, *Prunus persica* 8913.

disease control, *Botrytis cinerea*, shoot blight, *Pistacia vera* 2896.

disease control, canker, *Botryospheria dothidea*, *Maius pumila*, USA, Georgia 3900.

disease control, *Carya illinoensis* veins spot, *Gnomonia nersiveda*, fungicides 1137.

disease control, fungi, seed treatments, *Zea mays* 2093.

disease control, *Nectria cinnabarina* canker, *Gleditsia triacanthos* 3915.

disease control, *Phytophthora cactorum* fruit rot, *Botrytis cinerea* grey mold, *Fragaria chiloensis* 7214.

disease control, post-harvest decay, oranges, stem rot, green mold 5470.

disease control, *Pythium aphanidematum* damping-off, *Lycopersicon esculentum* 1228.

disease control, *Pythium*, dieback, *Daucus carota* 8116.

disease control, root rot, *Ficus benjamina* 8918.

disease control, *Sclerotinia*, crown rot, stem rot, *Medicago sativa* 5527.

drug sensitivity testing, *Pseudocercospora herpotrichodes* 3899.

drug tolerance, *Mycosphaerella fijiensis* 7325.

Benomyl, (continued)

effects on shoots tissue culture, infected *Solanum tuberosum*, potato virus X, potato virus S 8001.

foliar applications, effects on *Verticillium lecanii*, biological control, *Myzus persicae*, *Macrosiphoniella sanborni* 6091.

fungicides, disease control, leaf rust, stripe rust, triticum aestivum 2904.

+metaxyl, fumigation, comparison, drenches, disease control, *Phytophthora fragariae* infection, *Fragaria* 1182.

prevention, *Cylindrocycladium heptaseptatum*, *Cylindrocycladium pteridis*, post-harvest decay, *Rumohra adiantiformis* 8128.

resistance, *Penicillium italicum*, *Penicillium digitatum*, post-harvest decay, benzimidazoles 2901.

rhizoctonia sensitivity 8106.

rhizo, *Colletotrichum gloeosporioides* polygalacturonase inhibition 1224.

seed treatments, seed germination, *Zea mays* 2094.

+streptomycin+erythromycin, seed treatments, stimulation, *Bradyrhizobium japonicum*, *Monilinia laxa*, *Prunus americana*, detection, characterization 1139.

use, *Conarium quercum* f.sp. *banksianae* rust disease control, *Pinus* 3916.

Verticillium albo-atrum resistance 3009.

Bentazon,

antibacterial activity, *Streptomyces soil* isolates 4737.

Benzalkonium chloride,

antibacterial activity, surfactants effects on 9261.

biodegradation, acclimatization, activated sludge 4112.

Benzene,

biodegradation, reviews 8278.

triacylglycerol lipase interaction, chemical modification 6033.

Benzimidazoles,

resistance, *Didymella bryoniae*, stem blight, *Cucumis* 1223.

tolerance, *Verticillium dahliae* 5720.

Benzo[a]pyrene,

biodegradation, reviews 8278.

biodegradation, soil, bacteria 4637.

Benzodifuran,

derivatives, antiviral activity, nucleic acids interaction 6483.

Benzoic acid,

biodegradation kinetics, *Pseudomonas* 6944.

derivatives, biodegradation, acclimatization, activated sludge 5829.

derivatives, biodegradation, *Micrococcus* 3664.

effects on *Aspergillus flavus* aflatoxin B1 biosynthesis, in vitro 7095.

effects on *Byssoschlamys nivea*, biomass, patulin biosynthesis 6207.

Benzoic lactams,

inhibition peptidyl dipeptidase A 2306.

p-Benzoquinone,

effects on urea hydrolysis, urease activity, soil 7250.

Benzo(f)quinoline,

combustion products, phase P22 mutagenicity testing, *Salmonella typhimurium* 3331.

Benztiazuron,

herbicides, nitrification, soil 9026.

Benzyol isothiocyanate,

Carica papaya, relationship, disease resistance, *Phytophthora palmivora* 3861.

Benzyol 2-methyl-3-oxobutyric acid,

reduction, α -methyl β -hydroxy esters biosynthesis, yeasts 3560.

N-(Benzyldithio)carbamic acid,

aryl esters, antifungal activity 2224.

Benzyloxy pyridazines,

disease control, *Rhizoctonia solani*, sheath blight, *Oryza sativa* 5534.

Benzympenicillin,

antibacterial activity, inhibition, β -lactamase 6532.

antibiotic resistance, *Staphylococcus aureus*, relationship protein A biosynthesis 9054.

deacylation, penicillin amidase activity, models 7436.

deacylation, β -aminopenicillanic acid production, penicillin amidase activity, bioreactors 6531.

interaction, *Neisseria gonorrhoeae*, antibacterial activity, probenecid 6459.

production, industrial applications, *Penicillium chrysogenum* 9171.

splitting, β -lactamase activity measurements 6827.

synthesis, 2-oxo-penamams, penams 6537.

Berberis,

Pseudomonas syringae pv. *berberidis* etiology, leafspot, leaf fall, British Isles 8873.

Berberis candidula,

Pseudomonas syringae pv. *berberidis* etiology, leafspot, leaf fall, British Isles 8873.

Berberis gagnepainii,

Pseudomonas syringae pv. *berberidis* etiology, leafspot, leaf fall, British Isles 8873.

Berberis hookeri,

Pseudomonas syringae pv. *berberidis* etiology, leafspot, leaf fall, British Isles 8873.

Berberis julianae,

Pseudomonas syringae pv. *berberidis* etiology, leafspot, leaf fall, British Isles 8873.

Beryllium,

oxides, inhibition *Rhizobium leguminosarum* var. *trifolii* nodulation, *Trifolium* 7234.

Beta vulgaris,

crop residues, polysaccharides, β -D-fructofuranosidase hydrolysis 8674.

damping-off, biological control, *Pythium oligandrum* 8111.

extracts, pigments production, fermentation, *Candida utilis* 6069.

food processing wastes, digestion (anaerobic), methanogenesis 6691.

juices, fermentation, ethanol, *Saccharomyces cerevisiae* 987.

Laetisaria arvalis, antagonism, effects on, *Phoma betae*, infection 8032.

nitrogen-fixing bacteria competition 1278.

plant diseases, beet mosaic virus, etiology, Albania 6258.

plant diseases, beet western yellows virus, Israel 4539.

Pythium ultimum root rot, *Laetisaria arvalis* biological control 323.

roots, plant diseases, plant viruses, vectors, *Polymyxa betae*, British Isles 7190.

roots, transport, sodium, potassium, fusicochin effects on 8741.

rosette, etiology, rickettsia-like organisms 3845.

seed treatments, *Agrobacterium radiobacter* polysaccharides, roots growth

Subject Index

Beta vulgaris, (continued)

- stimulation, biological control, damping-off, *Pythium ultimum* 2891.
- seedlings, *Phoma betae* infection, disease control 8851.
- tubers, sugars fermentation, ethanol production, cost-benefit analysis 8656.
- Betaenone**
- metabolites, *Phoma betae*, isolation, characterization, new records 7115.
- Betaenone C**
- Phoma betae*, isolation, characterization, new records 7115.
- Betaenone D**
- Phoma betae*, isolation, characterization, new records 7115.
- Betaenone E**
- Phoma betae*, isolation, characterization, new records 7115.
- Betaenone F**
- Phoma betae*, isolation, characterization, new records 7115.
- Betaline**
- effects on, *Propionibacterium shermanii*, *Propionibacterium*, cyanocobalamin, biosynthesis 146.
- stimulation, cyanocobalamin, biosynthesis, 5-aminovalerate synthase, mediation, *Pseudomonas denitrificans* 6094.
- stimulation, *Pseudomonas denitrificans*, cyanocobalamin, production, association, protein biosynthesis 4401.
- Betula**
- rust, temperature effects on, spore germination, urediniospores, *Melampsorium betulinum* 8950.
- seedlings inoculation, roots colonization, succession, spatial distribution, soil, ectomycorrhizas 5556.
- Betula alba**
- water stress, *Botryosphaeria dothidea*, hyphae, morphology 4614.
- Betula glandulosa**
- litter biodegradation, leaves, winter, sub-polar environments 3907.
- Betula pendula**
- seedlings, colonization, basidiospores inoculum, ectomycorrhizas 5559.
- seedlings, colonization, ectomycorrhizas, spreading, *Betula pubescens* 5558.
- transmission (vertical), cherry leaf roll virus, virus-like particles, localization, pollen, anthers 7990.
- Betula pubescens**
- Basidiomycetes, ectomycorrhizas, Finland 2102.
- ectomycorrhizas, Boletaceae, ecological distribution, Finland 2100.
- ectomycorrhizas, phosphate, nutrient uptake, phosphatase, comparison saprophytes, Basidiomycetes 5575.
- ectomycorrhizas, spreading, colonization, seedlings, *Betula pendula* 5558.
- ectomycorrhizas succession, spreading, spatial distribution, fruit bodies 5557.
- Beverages**
- bottles, spoilage, microorganisms, reviews 7872.
- microorganisms contamination, pasteurization, cooling water 1913.
- BHK cells**
- herpes simplex virus infected, 9-(2-hydroxyethoxymethyl)guanine effects on DNA biosynthesis 4767.
- Biataque**
- streptomyces hygroscopicus, use bioassays, cyanocobalamin 5905.
- Bibliographies**
- alfaloxins, contamination, food 5379.
- indicator species, microbial pollution, reviews, water analysis 4945.
- moxalactam 5771.
- reviews, denitrification, wastewater treatment 4908.
- reviews, dairy industry, wastewater treatment 4914.
- reviews, disinfection, wastewater treatment 4909.
- reviews, industrial wastes, wastewater treatment 4917.
- reviews, microbial pollution, water analysis 4946.
- reviews, public health, land disposal, wastewater treatment 4911.
- reviews, waste water, land disposal 4910.
- reviews, wastewater treatment, activated sludge 4905.
- reviews, wastewater treatment, digestion (anaerobic) 4907.
- reviews, wastewater treatment, industrial wastes, breweries 4913.
- reviews, wastewater treatment, lagoons 4906.
- reviews, wastewater treatment, meat industry 4912.
- reviews, wastewater treatment, oil and gas industry 4916.
- reviews, wastewater treatment, rotating discs 4904.
- reviews, wastewater treatment, textile industry, industrial wastes 4915.
- reviews, water pollution, indicator species, microbial pollution 4944.
- reviews, water-borne diseases, drinking water 4947.
- Biobarbonate**
- glucose, acetic acid, effects on, digestion (anaerobic), waste treatment 3191.
- Bicyclomycin**
- antibacterial activity, anaerobic bacteria 3164.
- synthesis, diketo piperazine, chemical modification 8371.
- Bicyclo[3.2.0]hept-2-en-6-one**
- reduction, dehydrogenase, *Saccharomyces cerevisiae*, *Curvularia lunata*, *Mortierella ramanniana* 5255.
- Bidens mottle virus**
- infection, Compositeae susceptibility 3825.
- Bifenox**
- effects on, development, mycorrhizas, *Pinus ponderosa*, *Pseudotsuga menziesii* 5382.
- Blifidobacterium**
- clinical isolates, antibiotic sensitivity testing 4043.
- Blifidobacterium adolescents**
- isolation, feces, man, indicator species, water pollution 562.
- Blifidobacterium bifidum**
- protoplasts induction 6752.
- Blifidobacterium bifidum subsp. pennsylvanicum**
- β -D-galactosidase, purification, characterization 3515.
- Blifidobacterium breve**
- isolation, feces, man, indicator species, water pollution 562.
- Blifonazole**
- antifungal activity, inhibition, ergosterol biosynthesis, yeasts, dermatophyte fungi 8314.
- Bliken test**
- Escherichia coli* enterotoxins detection, traveller's diarrhea clinical isolates 1938.
- Bila**
- cattle, *Laemonostoc oenos* resistance, effects on viability, freeze-drying, malolactic fermentation, wine 6125.
- determination, immobilized enzymes, 7 α -hydroxysteroid dehydrogenase + alkanal monooxygenase (FMN-linked) + NAD(P)H dehydrogenase (FMN), serum 5131.
- effects on antibiotic resistance, *Staphylococcus* 6439.
- Bile acids**
- binding, mycelia, single-cell protein, *Penicillium commune* 7675.
- effects on antibiotic resistance, *Staphylococcus* 6439.
- measuring techniques, bioluminescence bioassays, immobilized enzymes, alkanal monooxygenase (FMN-linked) + dihydrolipoamide dehydrogenase + 3 α -hydroxysteroid dehydrogenase 3482.
- metabolism, *Eubacterium lentum* 1888.
- +nitrofurans, antibacterial activity, *Staphylococcus* 7358.
- Bile salts**
- biliary tract infection, effects on antibiotics antibacterial activity 4042.
- Biliary tract**
- infection, bile salts effects on antibiotics antibacterial activity, *Staphylococcus* 4042.
- Blifverdin reductase**
- purification, characterization, *Myrothecium verrucaria* 94.
- Bloccumulation**
- copper, polysaccharides adsorption 3975.
- heavy metals, polysaccharides adsorption, *Zoogloea ramigera* 3973.
- metals, leaching, reviews, microorganisms 5692.
- silver, autoradiography, conidia, *Botrytis cinerea* 8484.
- sulfur, Thiobacillus ferrooxidans, localization 2181.
- thalasol, streptomycin production, *Streptomyces griseus* 4848.
- Bioassays**
- acetyl-CoA acetyltransferase, activity, *Klebsiella pneumoniae*, characterization 8612.
- activated sludge respiration, toxicity testing, chemical pollution 543.
- agar diffusion test, metronidazole, *Clostridium perfringens* 7365.
- agglutination, virulence, *Yersinia* 6758.
- alkanal monooxygenase (FMN-linked), ATP, *Staphylococcus aureus*, methicillin, antibacterial activity 4069.
- amphotericin B, spectrophotometry, *Streptomyces nodosus* 4857.
- ATP levels, immobilized enzymes, bacterial luciferase 8564.
- ATP, *Mycobacterium leprae* viability, leprosy, man 7584.
- Bacillus subtilis*, *Bacillus stearothermophilus*, spores, sterilization, medical instruments, dental manipulation 7545.
- Bacillus thuringiensis*, biological control, *Culicoides*, *Lepidopterus* 3573.
- Bacillus thuringiensis* biological control efficacy, *Culicoides* larvae 5083.
- bacteria, cell adhesion, comparison 7615.
- bacteria, colonization, roots, Zea mays, interspecific relationships 4639.
- bioluminescence, bile acids measuring techniques, immobilized enzymes, alkanal monooxygenase (FMN-linked) + dihydrolipoamide dehydrogenase + 3 α -hydroxysteroid dehydrogenase 3482.
- Cestridium difficile*, antisera, adsorption, detection, toxins 5382.
- crown gall, *Malus pumila*, *Rosa rugosa* 343.
- cyanocobalamin, use biolaphos 5905.
- detection, toxicity, *Xanthomonas campestris* pv. *puri*, association, membrane potential, *Prunus persica*, cell culture 9156.
- Escherichia coli*, serum levels, tobramycin, netilmicin 4866.
- Escherichia coli* soil, hydroxamic acid siderophores incidence 675.
- fatty acids serum levels, *Pseudomonas aeruginosa* bioassays, *Candida tropicalis* acyl-CoA oxidase 586.
- focus formation, methodology, avian reticuloendotheliosis virus 5015.
- food, detection, *Escherichia coli* 7844.
- 6-D-glucose-dase activity, fungi 5166.
- gram-positive bacteria, detection, soil, use, teichoic acid 8202.
- hemolysins production, factors affecting, *Vibrio vulnificus* 6786.
- hydroxyapatite, cell adhesion, *Streptococcus sanguis*, optimization 5070.
- identification, *Streptococcus*, *Listeria*, clinical aspects, methodology 5075.
- immobilized enzymes, clinical microbiology 88.
- interferon antiviral activity, herpes simplex virus, vesicular stomatitis virus, man 4773.
- lactic acid, lactate oxidase, immobilization, *Acetobacter peroxidans* 3447.
- methotrexate measuring techniques, use *Lactobacillus casei* 2472.
- Micrococcus luteus*, hydrolysis, ampicillin esters, factors affecting 2265.
- microorganisms, food, methodology, books 9336.
- nitrogen sources, carbon sources, bacteria, acetylene reduction, effects on 7614.
- resistance, polyhydroxy virus mortality *Heliothis armigera* larvae, use biological control 967.
- polysaccharides, enzymes 3528.
- pyridoxine, *Saccharomyces carlsbergensis* 813.
- Salmonella typhimurium*, siderophores requirements, soil 375.
- toxicity testing, aquatic environment pollutants, luminous bacteria 1601.
- t-2 toxin, growth, larvae, *Maenestra confugata* 3731.
- toxins, *Pasteurella multocida* 8761.
- triadimenol sensitivity, *Rhynchosporium secalis* 5530.
- Bioavailability**
- lysine, single-cell protein, *Torulopsis utilis* 1730.
- Biochemical oxygen demand**
- assays, nitrification inhibitors, 2-chloro-6-(trichloromethyl)pyridine, waste water 1476.
- biodegradation assays, reviews 7822.
- biodegradation, dissolved oxygen, organic matter, biomass, microorganisms, ATP, waste water, rivers 1454.
- oxygen consumption, monitoring, automated methods, activated sludge 6688.
- waste water, chemical analysis, electrodes, immobilized cells 768.
- wastes, microorganisms, measuring techniques, enumeration, waste water, biochemical characteristics, reviews 4918.
- water analysis, pollution monitoring, methodology 6680.
- Biocides**
- antibacterial activity, sulfate-reducing bacteria, use, oil and gas industry 1299.
- control, fungi, biodegradation, wool 1288.
- Biodegradability**
- aromatic compounds, ozonation, wastewater treatment 2371.
- pyridines, nitrotriacetic acid, dodecylbenzene, stearic acid, solubility, microorganisms 6158.
- Biodegradation**
- acetanilide, nitrilase, amidase, *Brevibacterium* 3665.
- adhesives, forest products, fungi 7241.
- alicyclic alkanes, reviews, microorganisms 8281.
- alicyclic ring, reviews 8277.
- alkanes, reviews, microorganisms 8280.
- alkyl sulfonates, wastewater treatment, *Pseudomonas rathonis* 6952.
- alkyl alcohol, microorganisms 4434.
- Alnus* leaves, *Epilobium nigrum*, *Cladosporium cladosporioides*, aquatic environment 184.

Biodegradation, (continued)

aniline, dodecyl benzene sulfonate, microorganisms, characterization 1033.
 aniline, *Frateria* 6162.
 aniline, metabolic pathways, aquatic microorganisms 8688.
 aniline, nitrification inhibition, activated sludge 4093.
 aniline, *Rhodococcus erythropolis* 2708.
 aromatic compounds + halogens, microorganisms, mechanisms, reviews 7826.
 aromatic compounds, adsorption, carbon (activated), wastewater treatment 1475.
 aromatic compounds, pathway characterization, plasmids genetic control, reviews 8279.
 aromatic hydrocarbons, chlorination, TOL plasmid, *Pseudomonas cepacia*, *Pseudomonas* 5313.
 aromatic hydrocarbons, reviews, microorganisms 8282.
 Arthrobaacter, lignocelluloses, effects on digestibility, Ruminantia 7882.
 arylglycerol- β -aryl ethers, pathway, *Phanerochaete chrysosporium* 2712.
 Aspergillus fumigatus, Saccharum officinale bagasse, enzymes, role 186.
 assays, chemical pollution, aquatic microorganisms, rivers 2329.
 assays methodology comparison, reviews 7822.
 association, *Pseudomonas*, vanillic acid, catabolism 1000.
Bacillus brevis, *Achromobacter*, 4-chlorobiphenyl 5304.
 bacteria, heparin, chondroitin sulfate, media use detection 9293.
 bacteria, oil, sampling, enumeration, reviews 4437.
 bacteria, oil, sea water, continuous culture 1893.
 bacteria, reviews, pathway evolution, enzymes activity 7821.
 bagasse, sodium hydroxide pretreatment, single-cell protein production, *Chaetium cellulolyticum* 1715.
 Basidiomycetes, ascocytic fibers, Ascomycetes, Deuteromycetes, effects on 1031.
 benz[a]pyrene, soil, bacteria 4637.
 benzoic acid derivatives, *Micrococcus* 3664.
 benzoic acid, kinetics, *Pseudomonas* 6944.
 benzoic acid, phenols, derivatives, acclimatization, activated sludge 5829.
 1,4-butanediol polymers, *Moraxella* 5163.
 carbolaran, fensulfuthion, bacteria, pesticide pollution, soil pollution 2173.
 carbolfuran, soil microorganisms, soil, factors affecting 6387.
 carbon (activated) adsorption, aromatic compounds removal, water treatment 7502.
 carbon (activated) adsorption, trihalomethanes removal, water treatment 7501.
 +carbon (activated) adsorption, water treatment 7498.
 +carbon (activated) adsorption, water treatment, ground water 7499.
 carbon compounds, reviews 7823.
 carbon sources, soil microorganisms, heat production association 2150.
 cellulose, U.V. radiation mutants, *Aspergillus fumigatus* 2707.
 cellulose, β -D-glucosidase activity, immobilized cells, *Alcaligenes faecalis* 5190.
 cellulose, biomass measurements, monitoring, computer applications, fermentation, *Sporocyrtococcus myxococcoides* 5165.
 cellulose, hydrogen peroxide, free radicals, brown rot, *Poria placenta* 6173.
 cellulose, *Mycelophthora thermophila*, taxonomy 1889.
 cellulose, soil microorganisms, preservatives 7302.
 CGA-15281, soil microorganisms, structure-activity relationships, orchards, *Prunus persica* 5686.
 chemical pollution, marine environment, estuaries, role, genetic engineering microorganisms release 3681.
 chemical pollution, monochlorobiphenyls, biphenyl, rivers 185.
 chemical pollution, use, genetic engineering microorganisms, books, conferences 3392.
 chemical pollution, use, genetic engineering microorganisms, ecological evaluation 3685.
 chitin membranes, bacteria 1036.
 6-chloro-N-ethyl-1,3,5-triazine-2,4-diamine, *Rhodococcus coralinus* 8691.
 2-chloro-1,3,5-triazine-4,6-diamine, *Pseudomonas* 7834.
 chlorobenzene, bacteria, isolation, metabolism, characterization 2718.
 chlorobenzoates, *Aspergillus niger* 6170.
 3-chlorobenzoic acid, plasmids, gene transfer, *Pseudomonas putida* 1008.
 chlorophenol, bacteria, sewage sludge 2703.
 confertyl alcohol, fungi 190.
Crasostrea gigas, shells, minerals, bacteria 4439.
 cressote, aquifers contamination, methanogenic bacteria, *Pseudomonas stutzeri* 5615.
 cyanuric acid, soil microorganisms 1894.
 2,4-D, phenoxycetic acid, chlorine derivatives, hydrophobicity, structure-activity relationships, *Pseudomonas putida* 1882.
 2,4-D, soil amendment polysaccharides stimulation, bacteria 6389.
 2,4-D, soil moisture, soil microorganisms 6390.
 2,4-D, stimulation, soil amendment, organic compounds, bacteria 6391.
 2,4-D, temperature effects on, soil microorganisms 4433.
Daucus carota, cellulase, pectinase 5538.
 deoxycholic acid, *Pseudomonas*, anaerobic conditions 6154.
 detergents, alkyl sulphate, purification, characterization, *Pseudomonas* 4343.
 detergents, estuaries, fungi, estuaries, freshwater environments 1037.
 dibenzothophene, thianaphene, 2-thiophenecarboxylic acid, bacteria, reviews 7825.
 3,4-dichloroaniline, bacteria, fungi 6947.
 1,2-dichloroethane, gram-negative bacilli 1020.
 diethyl phthalate, aquatic microorganisms 7837.
 dihydroalanyl acetate, *Pseudomonas integritas* 6957.
 4-dinitrotoluene conversion, wastewater treatment, activated sludge 7493.
 disinfectants, acclimatization, activated sludge 4112.
 dissolved oxygen, organic matter, biochemical oxygen demand, biomass, microorganisms, ATP, waste water, rivers 1454.
Eisenia bicyclis β -D-glucan, *Rhizopus* exo-1,3- β -D-glucanase 3670.
 3-[4-(ethoxy-3-methoxyphenyl)-2-(4'-methoxyphenyl)propionyl] acid, association, lignin, metabolism, *Phanerochaete chrysosporium* 3682.
 ethbenzene, 1-phenylethanol, plasmids, *Pseudomonas fluorescens* 4425.
 filter paper, Graminae root rot fungi 1001.
 1-fluoronaphthalene, stereoselectivity, *Cunninghamella elegans* 7835.
 forests, litter, wood, microorganisms 5537.
 fuels, heat treatments, control, *Cladosporium resinae*, *Penicillium corylophilum*, contamination 1296.
 fungi, olive food processing wastes, proteins production 871.
 fungi, wood, soil, nitrogen, effects on 1244.
 Fusarium, reviews, books 7649.
 glucosylsaccharinic acid, *Ancylobacter* 2717.
 glucose, soil microorganisms, soil pollution effects on, calorimetry 2933.
 Glycine max, soil nitrogen-15 levels association 2959.
 heavy metals pollution, bacteria 3680.
 herbicides, soil microorganisms 3969.

Biodegradation, (continued)

hexamethylene diamine, *Bacillus subtilis*, storage conditions effects on, hexamethylene diamine, biodegradation, *Bacillus subtilis*, storage conditions effects on 1007.
 hydrocarbons, aromatic compounds, reviews 8278.
 hydrocarbons, gases, reviews, microorganisms 8283.
 hydrocarbons, industrial effluents, oil and gas industry, wastewater treatment, *Pseudomonas aeruginosa*, Egypt 2190.
 hydrocarbons, metabolism, isobutane, propane, oxygenase activity, *Nocardia paraffinicum* 8275.
 hydrocarbons, plasmids, genetic analysis, reviews, hydrocarbon-degrading bacteria 8284.
 hydrocarbons, *Pseudomonas aeruginosa* 4683.
 hydrocarbons, *Pseudomonas*, mechanisms 3988.
 hydrocarbons, reviews 8276.
 hydrocarbons, sewage microflora, waste water, oil installations 2374.
 hydrocarbons, soil, sewage sludge, applications, microorganisms, role 4686.
 industrial wastes, soil pollution, microorganisms, reviews 1018.
 industrial wastes, substrates, haloaromatics 3207.
 insulation foams, buildings, decay fungi, Basidiomycetes 7243.
 interaction carbon (activated) adsorption, water treatment 7646.
 kinetics, phenol, activated sludge 6674.
 land disposal soil pollution, microorganisms 4120.
 laudanone, oxidation, *Pseudomonas putida* 2715.
 leather, parchment, bacteria, proteolytic enzymes activity 8693.
 lignin, *Aspergillus* 7819.
 lignin, decay fungi, white rot, brown rot, soft rot, vanillic acid, syringic acid, metabolism 2705.
 lignin, depolymerization, respiration, *Phanerochaete chrysosporium* 7817.
 lignin, enzymes, protoplasts, *Fomes annosus* 8673.
 lignin, fungi, bacteria 6152.
 lignin, humus formation, pathway, microorganisms 8965.
 lignin, lignocelluloses, cellulase deficient mutant, *Sporotrichum pulverulentum* 1886.
 lignin, lignocelluloses fermentation, white rot, optimization, straw, *Triticum aestivum* 1887.
 lignin, mechanisms, *Phanerochaete chrysosporium* 4442.
 lignin, metabolism 5308.
 lignin, microorganisms 2725.
 lignin, microorganisms 7320.
 lignin, *Phanerochaete chrysosporium* 1884.
 lignin, protocatechuate 3,4-dioxygenase, catechol 1,2-dioxygenase, fungi, bacteria 4440.
 lignin, reviews 3599.
 lignin, reviews 7829.
 lignin, straw, *Cyanthus* 3653.
 lignin, *Streptomyces viridosporus*, *Streptomyces setonii*, protoplast fusion, enhancement 2702.
 lignin, *Trichosporon penicilliatum*, crop residues, *Zea mays* 6950.
 lignocelluloses, *Chaetium cellulolyticum*, *Sporotrichum pulverulentum*, pretreatment, sodium hydroxide, hydrogen fluoride, steam, single-cell protein production 1712.
 lignocelluloses, cotton, ginning, industrial wastes, textile industry, *Pycnoporus cinnabarinus* 6164.
 lignocelluloses, *Cyathus*, *Crucibulum laeve*, *Nidula niveo-tomentosa*, *Triticum aestivum*, *Acer saccharinum* 6948.
 lignocelluloses, *Fomes annosus*, white rot 5309.
 lignocelluloses, microorganisms, enzymatic activity 3688.
 lignocelluloses, *Agaricus* *substratus*, *Agaricus* *substratus*, culture, *Pleurotus sajor-caju* 2697.
 lignocelluloses, ozone pretreatment effects on 1880.
 lindane isomers, soil microorganisms 9023.
 litter, winter, nutrient loss 3907.
 luncheon meat, isolation, *Bacillus licheniformis*, *Streptococcus faecium* 2727.
 methylphenols, lignocelluloses, microorganisms 2704.
 man-made lignocelluloses, cellulase, *Trichoderma* 2711.
 methanol, metabolites production, biotechnology, reviews, methylotrophic bacteria 5228.
 methoxychlor, soil microorganisms 9024.
 methylene chloride, metabolism, *Pseudomonas* 3661.
 α -methylstyrene, bacteria 2700.
 microorganisms, *Abies alba* leaves 181.
 microorganisms, books 1683.
 microorganisms, isolation, media (culture), measuring techniques, reviews, books 5092.
 microorganisms, isoproturon, persistence, soil 4630.
 microorganisms, lignocelluloses, lignin, polysaccharides, *Spartina alterniflora*, *Rhizophora mangle* 5305.
 microorganisms, oil and gas industry effluents, effects on, USA, Wyoming rivers 9038.
 microorganisms, plants toxins effects on 8970.
 monohalogenated biphenyls water pollution, bacteria, sediments, aquatic environment, wastewater treatment 3692.
 monomethyl sulfate, industrial wastes, *Hyphomicrobium* 1016.
 nicotine, enantiomers, *Pseudomonas putida* 6149.
 nicotine, fungi 1890.
 nitrate reduction, 3,4-dichloroaniline, *Escherichia coli* 6161.
 nitrogen containing aromatic compounds, bacteria 1005.
 o-nitrophenol, m-nitrophenol, *Pseudomonas putida* 6157.
 nutrient availability, ash, land disposal, microorganisms 8257.
 octane, algae = *Acinetobacter calcoaceticus* 2191.
 oil, association, carbazoles, bacteria 4684.
 oil dispersants, aquatic bacteria, sea water 1876.
 oil, dispersants, effects on, bacteria 1303.
 oil, marine environment isolates, *Penicillium*, yeasts 7310.
 oil spills, bacteria, characterization 1302.
 oil spills, marine environment, enzymes, microorganisms 180.
 organic compounds, genetics, *Pseudomonas*, reviews 1013.
 organic compounds, microorganisms, wastewater treatment, industrial effluents 4090.
 organic compounds pollution, bacteria films, ground water 8690.
 organic compounds, reviews, books 8495.
 organic compounds, waste treatment, industrial wastes, microorganisms 1015.
 organic compounds, Zoogaea, activated sludge 7490.
 organic matter, carbon-14 enrichment, flux, turnover, soil microorganisms, soil 8964.

Biodegradation, (continued)

- organic matter, soil microorganisms, crop fields 1265.
organic matter, succession, community development, microorganisms, soil, reviews 4625.
pathway, eugenol, *Pseudomonas* 4421.
PCB, soil microorganisms 8976.
peatlands, physicochemical properties, microorganisms 2152.
pectin, *Saccharomycopsis fibuliger*, growth, waste treatment 7831.
pentachlorophenol, bacteria, role, wastewater treatment 1035.
pentachlorophenol, hexachloro-cyclopentadiene, parathion-methyl, industrial wastes, bacteria, fungi 3677.
peptone, propyl alcohol, methanol, metabolism, activated sludge 6706.
pesticide residues, *Saccharomycopsis cerevisiae*, association, fermentation 990.
pesticides, microorganisms enzymes, reviews 1019.
pesticides (organochlorine), bacteria 1014.
petroleum, *Acinetobacter calcoaceticus* var. *anitratus* 3985.
petroleum, *Acinetobacter calcoaceticus* var. *anitratus* 4682.
petroleum, books, microorganisms 8497.
petroleum, microorganisms, reviews 8287.
petroleum, reviews, soil microorganisms 8285.
petroleum, soil microflora 3987.
petroleum sulfur compounds, *Desulfotribio* 8274.
phenanthrene, naphthalene, Microcosm 1294.
phenazines, *Pseudomonas aureofaciens* 2716.
phenol, carbon (activated) adsorption, removal, water treatment, *Arthrobacter* 7500.
phenol, soil microorganisms 2141.
phenols, industrial effluents isolates, *Acinetobacter*, *Fusarium flocciferum* 8685.
phenols, water pollution, pollution effects, aquatic microorganisms 5812.
o-phenylphenol, activated sludge, rivers, aquatic microorganisms 7836.
N-(p-toluenomethyl)glycine, fomite ammonium, hexazinone, soil microorganisms 2175.
N-(phosphonomethyl)glycine, nutrient sources, *Pseudomonas*, *Alcaligenes* 8684.
phthalic acid, *Bacillus*, marine microorganisms, decarboxylation 998.
phthalic acid, bacteria, reviews 7828.
phthalic acid esters, relationship, carbon dioxide, production, microorganisms 3660.
phthalic acid, monobutyl phthalate, dibutyl phthalate, soil microorganisms 8961.
pollutants, ground water, bacteria 5814.
pollutants, kinetics, activated sludge, industrial effluents 1486.
pollutants, ozonation, wastewater treatment 1469.
pollutants, ozonation, wastewater treatment 1480.
pollutants, plasmids, genetic engineering, reviews, bacteria 4435.
pollutants, waste water infiltration, ground water, indigenous species, bacteria 5813.
polyvinyl alcohol, alcohol oxidase, *Pseudomonas* 2710.
protocatechuic acid, protocatechuate dioxygenase, purification, *Pleurotus ostreatus* 7754.
Pseudotsuga menziesii, lignocelluloses, streams, factors affecting, microorganisms 999.
pulp mills, effluents, bacteria 1467.
pulp mills, industrial effluents, toxicity, digestion (anaerobic), methanogenic bacteria 6669.
pusseine, cadaverine, sea water, media (culture), marine bacteria 3676.
quaternary ammonium compounds, industrial wastes, *Pseudomonas* 1017.
quinoline, nitrogen sources, kinetics, *Pseudomonas aeruginosa* 6951.
sewage sludge, bacteria, digestion (anaerobic), measuring techniques 4438.
soft rot, *Phallophora hoffmannii*, wood, cinematography 1245.
soil microorganisms, live roots, *Pinus resinosa*, *Acer saccharum*, *Quercus borealis* 3622.
soil microorganisms, sludges, land disposal, oil and gas industry 4919.
soil pollution, self-purification, soil microorganisms 4633.
Stereum frustulosum, enzymes, wood, lignin 1022.
sterols, *Mycobacterium aurum*, biosynthesis, progesterone, 1-dehydropregesterone 946.
straw, Chaetomium cellulolyticum, pretreatment, steam, ammonia, liquid culture 2696.
straw, rumen microorganisms, chemical composition association 2695.
straw, soil microorganisms, interaction, carbon, nitrogen, agricultural ecosystems 2699.
surfactants, alcohol dehydrogenase, arylsulphatase 189.
surfactants, quaternary ammonium compounds, freshwater microorganisms 5311.
2,4,5-T, dechlorination, methanogenic bacteria 5160.
2,4,5-T soil pollution, *Pseudomonas cepacia* 3679.
TCDD, Nocardiopeps, *Bacillus megaterium* 2713.
Tetrachaeum elegans, *Alnus* leaves, pectinolytic enzymes activity, calcium concentration effects on 1002.
tomatine, *Gymnosassa resili* 7839.
1,3,5-triazine, wastewater treatment, *Pseudomonas* 2698.
trifluoride, soil microorganisms 1041.
trihalomethanes removal, ozone+carbon (activated), water treatment 7497.
2,4,6-trinitrotoluene, hexahydro-1,3,5-trinitro-1,3,5-triazine, composting, soil decontamination 7511.
2,4,6-trinitrotoluene, *Pseudomonas denitrificans*, *Escherichia coli* 4432.
Triticum aestivum, straw, acids, *Trichoderma viride*, cellulase 6166.
urea, nitrification, soils (acid), heterotrophic bacteria 4671.
waste treatment, industrial wastes oil and gas industry, land disposal, soil microorganisms 2178.
wastewater treatment, plants industrial effluents 2380.
water isolates, bacteria, isopropyl N-phenylcarbamate, 2,4-D 6945.
wood, *Dacrymyces* 1891.
wood, energy resources, batch culture, digestion (anaerobic), microorganisms 3655.
wood, lignin, cellulose, microorganisms, reviews 4436.
wood, reservoirs, sub-polar environments, aquatic microorganisms 7838.
xenobiotics, bacteria, inhibition, aquatic microorganisms 8687.
xenobiotics, bacteria, reviews 1012.
xenobiotics, industrial wastes, bacteria 8393.
xenobiotics, *Pseudomonas* 4426.
Xylobolus frustulatus, *Quercus rubra*, *Quercus alba*, cellulose, lignin 3674.

Biodegradation, (continued)

- Aspergillus fumigatus*, feeds, domestic animals 1025.
Aspergillus niger, copper naphthenate, characterization 1038.
association, water potential, forest products, fungi 1242.
bacteria, fungi, pipes, air conditioning 4677.
bituminous materials, bacteria, metabolism 1304.

Biodegradation, (continued)

- colonization, forest products, microorganisms, relationship, catalase activity, creosote, effects on 1243.
contamination, fuels, *Cladosporium resinae*, nutrient requirements 1306.
corn, storage, fungi 1165.
forest products, bacteria, fungi, colonization, succession, preservatives, effects on 1241.
forest products, preservation 1250.
forest products, preservation, fungi, Switzerland 1249.
fuels, *Cladosporium resinae*, benomyl, antifungal activity 1298.
fungi, bacteria, fouling organisms, control, oil, forest products, effluents, Gramineae, books, conferences 1697.
fungi, bacteria, leather, museums, Kuwait 1024.
fungi, biological properties, characterization 1021.
fungi, buildings materials, preservatives, polyvinyl acetate 6394.
Fusarium, pharmaceuticals, reviews 6956.
monuments, molds, chemical control 1029.
oil and gas industry equipment, sulfate-reducing bacteria 6665.
oil, association, railway tracks, stimulation, field trials, fungi, bacteria 1305.
oil, emulsions, pasteurization, antimicrobial activity, bacteria, mathematical models 1297.
paintings, molds 1027.
polyurethane, Gladiolus roseum, characterization 1034.
polyvinyl chloride, films, fungi 1032.
polyvinyl chloride films, fungi, contamination 1039.
softwoods, forest products, protection, fungi, Canada 1248.
standard reference materials, fungi, bacteria 1028.
wood carvings, fungi, anthropology 1023.
wood, *Coniophora puteana*, *Aspergillus tamarii*, fungicides, prophylaxis 1252.
wood, dry rot, *Serpula lacrymans*, Switzerland 1247.
wood, role, actinomycetes 1246.
wool, control, biocides, fungi 1288.
- Bioelectrochemical cell,**
use, *Aspergillus niger*, glucose oxidase, xanthine oxidase, association, *Caldariomyces fumago*, chlorine peroxidase, chemicals synthesis 6076.
- Biogeochemistry,**
iron, microorganisms, reviews 8208.
manganese, microorganisms, reviews 8209.
microorganisms, books 8493.
organic matter decomposition, microorganisms, peatlands, reviews 7254.
phosphorus cycle, forests 5538.
silicon, microorganisms, reviews 8207.
soil microorganisms, conferences, books 2543.
sulfur, microorganisms, reviews 8206.
weathering, microorganisms, reviews 8210.
- Biological control,**
Aedes aegypti, *Bacillus thuringiensis*, serotypes, endotoxins, toxicity 8635.
Agrobacterium radiobacter, crown gall, *Agrobacterium tumefaciens*, fruit trees, reviews 333.
Agrobacterium radiobacter, crown gall, *Prunus persica* 334.
Agrobacterium radiobacter, crown gall, *Prunus amygdalis* 335.
Agrostis segetum, granulosis virus, Pakistan 6079.
anemias, ectomycorrhizas, soil-borne diseases, Pythium, Fagus 5513.
Arthrobacter, pitch canker, *Fusarium moniliforme* var. *subglutinans*, *Pinus* 2918.
Ascheronia aleyrodis, *Dialeurodes citri* 3565.
Ascheronia aleyrodis, *Trialeurodes vaporariorum* 3568.
Aspergillus varicolor, *Alternaria alternata* leaf blotch, *Hordeum vulgare* 2083.
Aureobasidium pullulans antagonism *Alternaria solani*, *Lycopersicon esculentum* 2080.
Azotobacter chroococcum antagonism, *Rhizoctonia solani* infection, *Solanum tuberosum* 2088.
Bacillus penetrans, *Meloidogyne javanica* 1853.
Bacillus sphaericus α -endotoxin, toxicity, larvae, *Culex pipiens*, *Anopheles stephensi* 3572.
Bacillus sphaericus, pathogenicity, phage typing, larvae, *Culex quinquefasciatus* 2693.
Bacillus sphaericus spore crystals, larvae, *Culicidae* 6917.
Bacillus sphaericus spores, fate, ponds, larvicides, *Culex tarsalis*, *Anopheles franciscanus* 1845.
Bacillus sphaericus, sporulation, relationship, toxicity, *Culex pipiens*, larvae 6089.
Bacillus sphaericus, virulence, *Simulium damnosum* 5261.
Bacillus subtilis antagonism, *Phytophthora cactorum* crown rot, seedlings, *Malus pumila* 7212.
Bacillus subtilis, post-harvest decay, brown rot, *Monilinia fructicola*, fruits 8053.
Bacillus thuringiensis δ -endotoxin, toxicity, *Pectinophora gossypiella*, *Entas isolata* 5247.
Bacillus thuringiensis, β -exotoxin, *Leptinotarsa decemlineata* 125.
Bacillus thuringiensis, *Bacillus sphaericus*, spores powder, *Culex quinquefasciatus* 6918.
Bacillus thuringiensis, *Bacillus sphaericus*, toxicity, pollution effects, fresh water, larvae, *Culex quinquefasciatus*, *Aedes aegypti* 2658.
Bacillus thuringiensis, bioassays, efficacy, *Culicidae* larvae 6083.
Bacillus thuringiensis, *Choristoneura fumiferana*, endotoxins induction anorexia 3570.
Bacillus thuringiensis, *Choristoneura fumiferana*, forests, *Abies balsamea* 7778.
Bacillus thuringiensis, *Choristoneura fumiferana*, USA, Wisconsin 139.
Bacillus thuringiensis, *Culicoides*, *Leptoconus*, bioassays 3573.
Bacillus thuringiensis, *Dioctria amatella* 8645.
Bacillus thuringiensis, effects on predator-prey interactions, larvae, *Spodoptera littoralis* 8643.
Bacillus thuringiensis, endotoxins, *Anopheles sanduicis* 134.
Bacillus thuringiensis exotoxins, toxicity, bioassays, larvae, *Hypera postica* 8641.
Bacillus thuringiensis, foliar applications, *Choristoneura fumiferana* 2652.
Bacillus thuringiensis, formulations, preservatives, xylene, sorbitol, *Choristoneura fumiferana* 2667.
Bacillus thuringiensis, instars susceptibility, pathogens, *Choristoneura fumiferana* 3554.
Bacillus thuringiensis, larvae, *Culex declarator*, *Simulium gouldii* 136.
Bacillus thuringiensis, *Mansonia uniformis* 123.
Bacillus thuringiensis, paddy fields, *Phanerochaete columbiae* 5264.
Bacillus thuringiensis, pathogens exposure time effects on mortality, recovery, *Choristoneura* 3555.

Biological control, (continued)

- Bacillus thuringiensis*, pathogens, foliar applications, efficacy, persistence, *Choristoneura fumiferana* 3556.
Bacillus thuringiensis, *Plodia interpunctella*, *Ephestia cautella* 4386.
Bacillus thuringiensis resistant mutant, U.V. radiation, temperature, *Insecta*
- Bacillus thuringiensis* spore crystals, surface net, morphology, toxicity, *Bombyx mori* 2660.
Bacillus thuringiensis, spores protection, sunlight inactivation 119.
Bacillus thuringiensis subsp. *entomocidus*, endotoxins, *Spodoptera littoralis* 3563.
Bacillus thuringiensis subsp. *berliner* β -exotoxin, clays, formulations, *Culicidae* 4398.
Bacillus thuringiensis subsp. *berliner*, larvae density effects on mortality, *Aedes aegypti* 4396.
Bacillus thuringiensis subsp. *comari*, antigenic characteristics, pathogenicity, *Insecta* 6913.
Bacillus thuringiensis subsp. *entomocidus*, endotoxins, *Spodoptera littoralis*, *Spodoptera exigua* 3566.
Bacillus thuringiensis subsp. *entomocidus*, *Spodoptera littoralis* 3564.
Bacillus thuringiensis subsp. *israelensis*, composts, *Lyoniella malt* 6103.
Bacillus thuringiensis subsp. *israelensis* formulations, field trials, *Culicidae* 6916.
Bacillus thuringiensis subsp. *israelensis*, *Simuliidae* 137.
Bacillus thuringiensis subsp. *israelensis*, streams, *Simuliidae*, USA, New Hampshire 779.
Bacillus thuringiensis subsp. *kurstaki*, *Choristoneura fumiferana*, field trials, USA, Michigan 6078.
Bacillus thuringiensis subsp. *kurstaki*, endotoxins, *Spodoptera littoralis*, *Spodoptera exigua* 3566.
Bacillus thuringiensis subsp. *tenebrionis*, *Coleoptera* 3569.
Bacillus thuringiensis toxins, comparison peptide antibiotics, toxicity, larvae, *Aedes aegypti* 2661.
Bacillus thuringiensis var. *israelensis*, suspended matter, turbidity, effects on efficacy, *Aedes aegypti*, *Culex pipiens* 8642.
Bacillus thuringiensis var. *kurstaki*, γ -endotoxin, *Galleria mellonella* 7786.
Bacteria, pathogens surveys, *Insecta* 4390.
baculovirus, *Adoxyphes orana* 2642.
baculovirus, pathogenicity, infectivity, nontarget organisms, *Palaemonetes vulgaris* 6921.
Basidiomycetes, *Trichoderma volatiles* 7245.
Beauveria bassiana, conidia pathogenicity, replication, relative humidity effects on, *Bissus leucopertus* 7766.
Beauveria bassiana, conidia subculture effects on pathogenicity, *Galleria mellonella* 2656.
Beauveria bassiana, host plants effects on susceptibility, *Leptinotarsa decemlineata* 2651.
Beauveria bassiana, inoculum survival, soil, pupae, *Leptinotarsa decemlineata* 5213.
Beauveria bassiana, larvae, *Indarbela quadricornuta* 6061.
Beauveria bassiana, *Metarhizium anisopliae*, soil colonization, disease reservoir, *Curculio caryae* 5293.
Beauveria bassiana, *Oryzaephilus surinamensis* 3574.
Beauveria bassiana, spores survival, fungicides effects on, *Leptinotarsa decemlineata* 2647.
biolight, *Cryptonectria parasitica* virulence conversion, *Castanea dentata* isolates 6326.
biolight, *Cryptonectria parasitica* virulence conversion, *Castanea dentata* isolates 6327.
Castanea sativa biolight, *Endothia parasitica* virulence conversion, double stranded RNA elimination 6328.
Catenaria anguillulae, *Meloidogyne incognita*, sodium azide, effects on 8253.
Catenaria anguillulae parasitism, spores, *Phytophthora cinnamomi*, *Phytophthora parasitica*, root rot, *Citrus*, *Persea* 5515.
Ceratophyllum demersum, fungi 6330.
cheat, biolight, *Endothia parasitica*, hypovirulence, strains incompatibility, genetic analysis 368.
Chironomus salinarum, population density, lakes, *Bacillus thuringiensis*, efficacy 6084.
Colletotrichum gloeosporioides spores production, weed control, fermenters, *Aeschynomene virginica* 3895.
Conidiobolus obscurus, *Erynia neopaphidis*, inoculum production, *Aphididae* 5231.
crop protection, books 8494.
crown gall, conferences 848.
crown gall, fruit trees 269.
Culex pipiens, *Aedes aegypti*, *Bacillus thuringiensis* subsp. *israelensis*, Israel 2672.
Culex pipiens, *Aedes aegypti*, *Bacillus thuringiensis* subsp. *israelensis*, Israel 354.
Culicidae, *Bacillus thuringiensis* subsp. *israelensis*, field trials 1854.
Culicidae, *Bacillus thuringiensis* subsp. *israelensis* toxins, toxicity 7790.
Culicimomyces clavisporus, dose-response effects, mortality, *Anopheles hilli* 2664.
Culicimomyces clavisporus infection digestive tract, ultrastructure, pathogenicity, larvae, *Anopheles* 2653.
Culicimomyces clavisporus, pathogens, *Culex annulirostris*, field trials, Australia 128.
Cyperus esculentus, *Puccinia caliculata*, characterization 1848.
damping-off, *Agrobacterium radiobacter*, extracellular polymers, polysaccharides, seed treatments, *Lycopersicon esculentum* 6309.
decay fungi, *Fagus sylvatica*, field trials, *Trichoderma viride*, *Bacillus* 5587.
decay fungi, *Fagus sylvatica*, fungi, *Bacteria* 5589.
disease control, plant diseases 1188.
Dissoconium aciculare, hyperparasitism, powdery mildew, *Erysiphe* 8911.
efficacy, *Bacillus thuringiensis* subsp. *israelensis*, *Simuliidae*, USA, South Carolina 4391.
Endothia parasitica, biolight, hypovirulence strains, temperature effects on growth rate, *Castanea dentata* 8184.
Endothia parasitica biolight, virulence, gene mapping, *Castanea dentata* 8183.
Entomophthora egressa virulence, role double-stranded RNA viruses, *Choristoneura* 8634.
Entomophthora planchoniana, cell culture methodology, *Aphididae* 5938.
Entomophthora planchoniana pathogens, orchards, Italy, *Corylobium avellanae* 5234.
Entomophthoraceae, field trials, pathogenicity, *Aphididae* 5230.
entomopoxvirus, *Arphia conspersa*, *Melanoplus sanguinipes*, *Locusta migratoria* 6905.

Biological control, (continued)

- Erynia aquatica* pathogenicity, *Aedes cantator* 2665.
Erynia neopaphidis, pathogens, field trials, *Stilpnotus avenae*, *Metopolophium dirhodum* 5229.
Erynia pieris, pathogenicity, *Pieris rapae*, host range, *Insecta* 6906.
Eutypa armeniacae wound infection, antagonism, conidia, *Fusarium lateritium*, orchards, *Prunus americana* 6307.
fungi, conferences, *Aphididae* 5944.
fungi, efficacy surveys, weeds 8650.
fungi pathogens, observation methods, *Globodera rostochiensis* 5224.
fungi, surveys, crop fields, British Isles, *Aphididae* 5233.
Fusarium, interspecific relationships, *Insecta*, host range, reviews 5215.
Fusarium oxysporum root rot, *Laccaria laccata* aromatic compounds, *ectomycorrhizas*, *Pseudotsuga menziesii* 5562.
Fusarium oxysporum f.sp. *apil* yellows, non-pathogenic strains, *Apium graveolens* 6306.
Fusarium, reviews, books 7649.
Gaeumannomyces graminis var. *tritici* take-all, *Triticum aestivum*, *Gaeumannomyces graminis* var. *graminis*+*Phialophora* 5512.
Gliocladium virens, carriers, *Rhizoctonia solani* 8919.
granulosis virus, effects on nontarget organisms, orchards, *Cydia pomonella* 4387.
granulosis virus, nuclear polyhedrosis virus, virulence, *Cadra ligulella* 6904.
Haematothia irritans, *Bacillus thuringiensis* subsp. *israelensis*, *larvicides* 5209.
Heterobasidium annosum, fungi antagonism, inoculum production, in vitro, *Picea abies* 8181.
Hirsutiella thompsonii var. *synnematos*, conidia production, liquid culture, inoculum, *Phytophthora oleivora* 3363.
host-pathogen interactions, *Acremonium zonatum* penetration, leaves, *Eichhornia crassipes* 8827.
Hypochoytrium catenoides, *Phytophthora* root rot, *Glycine max* 5510.
inoculum production, spore crystals, nutrient requirements, *Bacillus thuringiensis* subsp. *galeries* 7601.
Insecta, *Bacillus thuringiensis*, nuclear polyhedrosis virus, environmental factors 2671.
Insecta, conferences 846.
Insecta, *Fusarium*, reviews 6926.
Insecta, microorganisms, reviews 6077.
insecticides, exotoxins assays, high-performance liquid chromatography, *Bacillus thuringiensis* 2765.
Isaria tax, *Idiococcus clypealis* 7767.
killer factor double-stranded RNA, *Endothia parasitica*, virulence, blight, *Castanea dentata* 8638.
Laetisaria arvalis, *Pythium ultimum* root rot, *Beta vulgaris* 323.
Leguminifera giganteum, pathogens, *Culicidae*, aquatic environment 130.
Leguminifera giganteum pathogens, susceptibility, *Chaoborus flavicans* 5235.
larvae, *Aedes aegypti*, *Culex molestus*, *Bacillus thuringiensis* toxicity 6647.
larvae, *Spodoptera littoralis*, *Boarmia selenaria*, use, *Bacillus thuringiensis* endotoxins 118.
Leptoglyphia chapmanii, larvae, *Aedes* 8640.
Manduca sexta, pathogenicity, *Pseudomonas aeruginosa* cytotoxins, reviews 5211.
Mansonia uniformis, *Bacillus thuringiensis*, *Bacillus thuringiensis* 123.
Metarhizium anisopliae, inoculum production, factors affecting, *Cercopidae* 5266.
Metarhizium anisopliae isolates, pathogenicity, *Diatraea saccharalis* 6908.
Metarhizium anisopliae pathogenicity, larvae, *Aedes aegypti* 8630.
Metarhizium flavoviride, *Metarhizium anisopliae*, temperature effects on susceptibility, *Otiorynchus sulcatus* 2650.
microbiology, pathology, genetics, *Bacillus sphaericus*, *Culex*, *Anopheles* 6898.
Micrococcus pseudoflavifaciens pathogens, larvae, *Lymantria dispar* 5260.
microorganisms, insects 2673.
microorganisms, *Insecta* 8639.
Nomuraea rileyi conidia, virulence, *Trichoplusia ni* 6900.
Nomuraea rileyi, epizootology, *Platyphena scabra*, *Anticarsia gemmatilis*, *Pseudoplasia* includes 5214.
nuclear polyhedrosis virus, *granulosis virus*, susceptibility, larvae, *Heliothis zea*, *Heliothis virescens*, *Heliothis armigera* 6903.
nuclear polyhedrosis virus, *Heliothis armigera* 977.
nuclear polyhedrosis virus, histopathology, pathogenesis, *Mythimna separata* 7791.
nuclear polyhedrosis virus, infection susceptibility, *Heliothis sublexa*, *Heliothis zea* 2657.
nuclear polyhedrosis virus, larvae, *Neodiprion sertifer* 6093.
nuclear polyhedrosis virus, pathogens, *Rachipiusa ni*, *Rachipiusa* ou 2659.
nuclear polyhedrosis virus replication, cell culture epidermis, inoculum production, *Lepidoptera* 3249.
nuclear polyhedrosis virus, *Spodoptera littoralis* 3571.
nuclear polyhedrosis virus, *Tipula* iridescent virus, *bacteria*, pathogens, surveys, natural enemies, *Tipula paludosa* 2662.
nuclear polyhedrosis virus, *Trichoplusia ni*, dose-response effects, mathematical models, bioassays, *Trichoplusia ni*, *Heliothis zea*, *Spodoptera frugiperda* 6901.
onchocerciasis vectors, streams, *Simulium ochraceum*, *Bacillus thuringiensis*, Mexico 6915.
paddy fields formulations, aerial applications, distribution, paddy fields, *Psorophora columbiana* 6902.
papaya ringspot virus infection, use, *papaya ringspot virus* mutants, *Chenopodium quinoa* 8110.
pathogenicity, *Bacillus thuringiensis*, *Boarmia selenaria* 129.
pathogenicity, *Bacillus thuringiensis*, *Culicidae* 6085.
pathogenicity, chitinolytic bacteria-*Bacillus thuringiensis* var. *entomocidus*, *Spodoptera littoralis* 131.
pathogens, dose-response effects, mortality, *Culicimomyces clavisporus*, *Aedes aegypti* 6911.
pathogens, efficacy, persistence, ponds, *Bacillus sphaericus*, *Culicidae* 6914.
pathogens, *Hymenoptera*, *Ostrinia nubilalis* 6909.
pathogens, isolation, culture, *Entomophthora gammae*, *Pseudoplasia* includes 6088.
pathogens, larvae, hemolymph, *Bacillus thuringiensis* 6912.
pathogens, nuclear polyhedrosis virus propagation, association, *bacteria*, fungi, *Lymantria dispar* 6907.
pathogens, oviducts, eggs susceptibility, *Perileucoptera coffeella*, *Metarhizium anisopliae* 6910.
pathogens, persistence, recycling, growth, *Bacillus sphaericus*, *Culicidae* 6920.
pathogens, predator-prey interactions, *Bacillus sphaericus*, *Bacillus thuringiensis*, *Toxorynchites*, *Culicidae* 1841.
pathogens, production, formulation, *Bacillus sphaericus*, *Culicidae* 6897.
pathogens propagation, why recycling methodology, *Insecta*, *Bacillus thuringiensis*, δ -toxin 6899.
pathogens, snow pools, *Bacillus thuringiensis*, *Aedes*, USA, Michigan 6919.
Penicillium oxalicum seed treatments, *Pythium ultimum*, damping-off, root rot.

Biological control, (continued)

- Cicer arietinum* 8114.
- pest control, *Arthrobotrys irregularis*, soil properties, pesticide residues effects on, *Meloidogyne* 5218.
- pest control, *Bacillus thuringiensis*, *Etella behrii* 2844.
- pest control, granulovirus virus, field trials, *Cydia pomonella* 4388.
- pest control, *Neoplectana carpocapsae*+*Bacillus thuringiensis* subsp.kurstaki, *Platyptilia carduactyla* 5216.
- pest control, *Nomuraea rileyi*, *Pseudopulvis* includes, virulence, temperature, dosage effects on, *Anticarsia gemmatilis* 5212.
- pest control, viruses, *Insecta* 1844.
- pests, pathogens, nuclear polyhedrosis virus, experimental infection, mammalian cells, *Mammalia* 6896.
- phytopathogenic fungi, *Taralospira oligoclada*, hyperparasitism, *Sclerotinia* 975.
- phytopathogenic fungi, *Trichoderma* parasitism, ultrastructure 1213.
- Phytophthora parasitica var.piperina rot, fungi extracts, *Piper* beetle 5518.
- Pinus* needlecast, use, *Candida* 2924.
- plant diseases, pathogens, bacteria, fungi, plant viruses 4231.
- plant diseases, soil microorganisms, Myxobacterales, lysis, *Rhizoctonia solani* hyphae, *Coeliobolus miyabeanus* corda 8920.
- plants pathogens, books 844.
- Pseudomonas fluorescens* seed treatments, *Gaeumannomyces graminis* var.tritici, *all*, *Triticum aestivum* 336.
- Pseudomonas*, *Ophiostoma ulmi*, Dutch elm disease 2081.
- Pseudomonas putida*, antagonism, *Erwinia*, prevention, soft rot, post-harvest decay, *Solanum tuberosum* 8112.
- Pseudomonas putida* survival, soil moisture, suppression, *Fusarium oxysporum*, wilt, *Linum usitatissimum* 2897.
- Puccinia carludovici*, *Phytophthora*, rust, *Carduus tenuiflorus*, *Carduus pycnocephalus* 8025.
- Puccinia carduorum*, *Carduus nutans* susceptibility, weed control 6073.
- Puccinia chondrillina*, *Chondrilla juncea* weed control 6075.
- Puccinia chondrillina*, life cycle, *Chondrilla juncea* weed control, USA, Washington 6074.
- Pythium* oligandrum, damping-off, *Beta vulgaris* 8111.
- Pythium oligandrum*, hyperparasitism, *Rhizoctonia solani* 2079.
- Pythium oligandrum*, *Pythium ultimum* damping-off, *Lepidium sativum* seeds 974.
- Pythium* seed rot, *Pisum sativum*, use, *Trichoderma* 2779.
- Pythium ultimum*, damping-off, use, *pyloteuron*, biosynthesis, *Pseudomonas fluorescens* 331.
- Rhizoctonia*, *Rhizoctonia solani* brown patch, *Agrostis palustris* 6308.
- Rhizoctonia solani*, mycelia soil amendment, hyperparasitism, *Verticillium biguttatum*, *Gliocladium roseum*, *Solanum tuberosum* 2089.
- Rhizoctonia solani* sclerotia, *Verticillium biguttatum* treatment, *Lycopersicon esculentum* 325.
- rust, smut, *Bromus lectus* 8024.
- Serratia marcescens*, *Pseudomonas aeruginosa*, pathogens, toxicity, *Solenopsis richteri*, *Solenopsis invicta* 5257.
- Simulium olatum*, protein composition, phosphatase activity, *Coelomycidium simuli*, *Pleistophora simuli* 2646.
- soil inoculum, *Trichoderma viride*, *Trichoderma harzianum* 8918.
- sovere persistence, foliar applications, *Bacillus thuringiensis*, *Gossypium* 117.
- sporulation, *Bacillus sphaericus*, transformation, protoplast fusion, plasmid pUB110, plasmid pBC16, *Culicidae* 2666.
- strains pathogenicity, taxonomy, *Bacillus thuringiensis* 6924.
- Streptomyces albolineaceus*, *Streptomyces griseus*, inoculation, antagonism, Dutch elm disease, *Ulmus americana* 2890.
- suppressive soils induction, soil-borne diseases, phytopathogenic fungi, reviews 331.
- suppressive soils, soil-borne diseases, plant diseases 330.
- Tonilia japonica*, galls, leaves, *Protomyces macrosporus* 8029.
- Trichoderma*, antagonism, *Pythium*, soil 8115.
- Trichoderma harzianum*, carriers, *Rhizoctonia solani* 8919.
- Trichoderma harzianum*, *Pythium aphanidermatum*, plant diseases 4589.
- Trichoderma harzianum*, *Sclerotium rotsii*, plant diseases, *Helianthus annuus* 4586.
- Trichoderma viride*, *Pythium ultimum*, damping-off, *Fusarium solani* f.sp.pisi root rot, *Pisum sativum* 338.
- use *Bacillus sphaericus* toxins, gene expression, gene mapping, gene transfer 8628.
- use *Coelomycetes* sporophores, host range, pathogenicity, *Culicidae* 4395.
- use nuclear polyhedrosis virus, bioassays, mortality, larvae, *Heliothis amigera* 967.
- Verticillium biguttatum*, *Rhizoctonia solani*, plant diseases, *Solanum tuberosum* 3514.
- Verticillium lecanii*, benomyl foliar applications, effects on, *Myzus persicae*, *Macrosiphoniella sanborni* 6091.
- Verticillium lecanii*, Entomophthorales, research programs, *Aphididae* 5232.
- viruses, *Insecta*, reviews 7772.
- weed control, conferences, books 4249.
- weed control, cost-benefit analysis 3888.
- weed control, ecosystem management, epidemiology, pathogens 3894.
- weed control, pathogens 3889.
- weed control, relationship epidemics, plant diseases 3890.
- weed control, relationship genetic variance, weeds 3892.
- weed control, relationship host-pathogen interactions 3891.
- weed control, relationship, virulence, genetic variance, phytopathogenic fungi 3893.
- weed control, research programs, commercial species, microorganisms 3896.
- weed control, safety regulations, pathogens 3897.
- weed control, use *Phytophthora palmivora*, pathogenicity, *Morrenia odorata* 2809.
- wilt, bactericins production, avirulent, strains, *Pseudomonas solanacearum*, *Nicotiana tabacum* 8113.
- Zoopthora radicans, sporulation, temperature effects on, mortality, *Therioaphis trifolii* 1855.

Bioluminescence,

- ATP, detection bacteria growth, blood culture 751.
- bacteria detection, man 6767.
- bioassays, bile acids measuring techniques, immobilized enzymes, alkanal monooxygenase (FMN-linked)+dihydropyrimidine dehydrogenase+5 α -hydroxysteroid dehydrogenase 3482.

Biomass,

- activated sludge, ATP measurements, wastewater treatment 6696.
- adsorption, uranium, thorium, *Rhizopus arrizus* 3978.
- age distribution, mathematical models, fermentation 6129.

Biomass, (continued)

- aquatic bacteria, measuring techniques 8462.
- Aspergillus niger*, measuring techniques, use, resins effects on 1677.
- bacteria, community structure, fatty acids analysis, *Rhizophora* sediments 8989.
- bacteria, fungi, conversion, organic matter, wastes, methodology, books 6793.
- Bordetella pertussis*, colorimetry, methodology 9323.
- concentration, effects on β -D-galactosidase biosynthesis, *Escherichia coli* 6028.
- energy production, biotechnology, conferences, books 4248.
- Escherichia coli*, formation, bioactors, mathematical models, energetics 588.
- Pseudotsuga menziesii* forests 1232.
- Gracilaria tikvahiae*, methanogenesis, nitrogen recycling, bioactors, methanogenic bacteria 8272.
- harvesting, use filtration, cell aggregation, *Lactobacillus acidophilus* 6802.
- levels, substrates, oscillations, fermentation, continuous culture, mathematical models 5280.
- measurements, cellulosic biodegradation, fermentation, monitoring, computer applications, *Sporocytophaga myxococcoides* 6185.
- measurements, single-cell protein production, sulfite liquor, *Pekilo* process, *Paeclomyces varioti* 5965.
- measuring techniques, *Candida utilis* 798.
- measuring techniques, nitrogen-15, mass spectroscopy, lignocelluloses fermentation, *Chaetomium cellulosyrum* 5310.
- Medicago sativa*, nitrogen fixation, leghemoglobin, nodulation 2961.
- methanogenic bacteria, nitrogen sources effects on, methanogenesis, digestion (anaerobic), *Ulva*, *Gracilaria tikvahiae* 6396.
- microorganisms, biodegradation, dissolved oxygen, organic matter, biochemical oxygen demand, ATP, waste water, rivers 1454.
- organic acids production, energy resources, digestion (anaerobic), *Trichoderma reesei* 3417.
- organic compounds production, petrochemicals, books 3372.
- photosynthesis, phototrophic bacteria 8510.
- production, flocculation, yeasts 2552.
- production, *Fusarium*, reviews, books 7649.
- production, immobilized cells, fermenters 3402.
- production, microorganisms, conversion, organic matter, wastes, use, rural populations, rural environments, books 6794.
- production, microorganisms, slurries, media (enrichment) 7508.
- production, optimization, respiratory quotient monitoring, continuous culture, *Saccharomyces cerevisiae* 8501.
- production, peat hydrolysates, conferences, fungi 7645.
- production, peat hydrolysates, media (culture), *Agaricus campestris*, *Morchella esculenta* 6807.
- production, peat hydrolysates, sodium chloride, humic acids effects on, *Candida tropicalis* 6809.
- retention, digestion (anaerobic) 4122.
- Saccharomycopsis fibuliger*, *Candida utilis*, fermentation, potatoes food processing waste plant 157.
- single-cell protein production, gram-negative bacteria, *Agave fourcroyensis* crop residues 3415.
- soil microorganisms 1264.
- soil microorganisms, composts, methodology 5684.
- soil microorganisms, soil respiration, nitrogen soil amendment 2931.
- suspended matter, assays, carbon (activated) sewage sludges waste treatment 2379.
- use, energy production, conferences, books 1700.
- Vigna radiata*, bean common mosaic virus, nitrogen, effects on 4511.
- yeasts, production, straw fermentation 8526.

Bioreactors,

- acidic acid conversion, methanogenesis, methanogenesis, kinetics 3979.
- anaerobic conditions, wastewater treatment, industrial effluents, meat industry, pH, temperature, chemical oxygen demand effects on 3196.
- benzylpenicillin deacetylation, 6-aminopenicillanic acid production, penicillin amidase activity 6531.
- books 1684.
- cellulose, cellulose hydrolysis, *Trichoderma viride*, *Trichoderma longibrachiatum*, *Geotrichum candidum* 4355.
- cellulose conversion, kinetics 5175.
- cellulose hydrolysis, comparison 4441.
- cellulose hydrolysis optimization, *Trichoderma reesei* 3658.
- chemicals kinetics 1532.
- chlorobium thiosulfatophilum, carbon dioxide, nitrogen, oxidation, computer applications, monitoring 3612.
- coal, digestion (anaerobic), wastewater treatment 4109.
- cross-flow, silica supports, ethanol fermentation, immobilized cells, *Saccharomyces cerevisiae* 3605.
- denitrification, wastewater treatment, denitrifying bacteria 4107.
- design, methanogenesis, digestion (anaerobic), methane quality 5700.
- digestion (anaerobic), design, reviews 1488.
- digestion (anaerobic), fermentation kinetics, methane production 4404.
- digestion (anaerobic), methane production 3557.
- digestion (anaerobic), wastewater treatment, mathematical models 558.
- dynamics, computer applications 2426.
- effluents, digestion (anaerobic), methanogenesis, wastewater treatment 5827.
- electrochemistry, biotechnology, electron transfer 3401.
- enzymes, use, L-alanine synthesis 4261.
- Escherichia coli*, biomass formation, mathematical models, energetics 588.
- ethanol production, fermentation, optimization, mathematical models, *Saccharomyces cerevisiae* 6138.
- ethanol production, immobilized cells, *Zymomonas mobilis* 3618.
- ethanol production, *Zymomonas mobilis* 3638.
- ethanol production, *Zymomonas mobilis* 5293.
- fermentation, immobilization, biomass support particles, yeasts 4219.
- fermentation, reviews, microorganisms 5875.
- fermentation, structure, methodology 7809.
- films, formation, microorganisms, kinetics 3205.
- films, methanogenesis, anaerobic conditions, wastewater treatment, thermophilic bacteria 4928.
- fluidized beds, immobilized enzymes, β -D-galactosidase, *Aspergillus niger* 82.
- glucose, isomerization, fructose 8534.
- D-glucose, isomerization, *Streptomyces phaeochromogenes*, immobilized cells, comparison, glucose isomerase, immobilized enzymes, characterization 7746.
- Helianthus tuberosus, fermentation, ethanol production, immobilized cells, *Kluyveromyces marxianus* 3640.
- hydrogen production, isolates, *Enterobacteriaceae* 6923.
- immobilized cells, ethanol production 3634.
- immobilized cells, immobilized enzymes, reviews 8577.

Bioreactors, (continued)

immobilized cells, Saccharomyces, crop residues fermentation, ethanol production 3641.
 immobilized enzymes, *Escherichia coli*, asparaginase, blood detoxification 2575.
 immobilized enzymes, glucose oxidase, optimization 7735.
 immobilized enzymes, proteinase, proteins hydrolysis, crop residues, *Penicillium* dupii 3475.
 Kluyveromyces fragilis ethanol fermentation, use lactose 1869.
 lactose fermentation, ethanol, *Kluyveromyces fragilis* 3590.
 matrix, surface properties, methanogenic bacteria 421.
 measuring techniques errors 175.
 membranes, immobilized enzymes, β -D-galactosidase, *Aspergillus niger* 83.
 membranes, Saccharomyces cerevisiae, ethanol, fermentation 7804.
 methanogenesis, food processing wastes, *Coffea arabica* 7515.
 methanogenesis, nitrogen recycling, biomass, *Gracilaria tikvahiae* 8272.
 microorganisms, temperature kinetics 1534.
 nitrification, wastewater treatment 4118.
 peat, aerobic bacteria hydrolysis, digestion (anaerobic), methanogenesis, methanogenic bacteria 7303.
 production, butanol, acetone, *Clostridium acetobutylicum* 5244.
 productivity, gene expression, cloning vectors, plasmids 3403.
 proteins biosynthesis, immobilized cells, *Escherichia coli* 2.
 proteins purification 3427.
 proteins purification, precipitation methodology 3426.
 Rhizopus thailandensis, immobilized cells, exo-1,4- α -D-glucosidase, production, mathematical models 7723.
 Saccharomyces cerevisiae, ATP regeneration 169.
 Saccharomyces cerevisiae, immobilized cells, molasses fermentation, ethanol production 167.
 single-cell protein production, optimization, cost-benefit analysis, fermentation, Hansenula polymorpha, Methylomonas 5963.
 thermodynamics 1533.
 Trichosporon cutaneum, growth conditions 802.
 use enzyme thermistor, immobilized enzymes 4312.
 use, lactose hydrolysis, β -D-galactosidase, *Aspergillus niger* 4314.
 use, measuring techniques, microorganisms growth rate 2428.
 wastewater treatment, digestion (anaerobic) 4110.
 wastewater treatment, digestion (anaerobic) 4921.
 wastewater treatment, methanogenesis, industrial effluents, food processing, com 7510.
 yeasts immobilized cells, ethanol fermentation, feeds contamination molasses 6123.
Biotechnology,
 agriculture, developing countries 318.
 antibiotics production, fermentation, microorganisms, plant cells, cell culture, books 5061.
 biochemical characteristics, cells, books, conferences 1696.
 biomass, energy production, conferences, books 4248.
 books 1690.
 books 3397.
 books, reviews 5093.
 cell culture, recovery, *Trichoderma reesei*, filters 7635.
 cellulase, characterization, *Streptomyces flavoviridis* 5192.
 cellulose hydrolysis, cellulolytic enzymes, books 3386.
 cheese production, microorganisms, dairy starters 5328.
 chitin, reviews, fungi 5201.
 conferences 3393.
 electrochemistry, bioreactors, electron transfer 3401.
 electrodes, sensors 6732.
 enzymes, books 3375.
 enzymes, thermophilic bacteria 2628.
 enzymes, thermophilic bacteria 7794.
 ergot alkaloids production, reviews, fungi 4379.
 ethanol production, bacteria, fungi, yeasts, books 4234.
 ethanol production, yeasts, bacteria, books, conferences 5943.
 ethanol production, A hybrids, genetic engineering, *Pseudomonas aeruginosa* 7121.
 fermentation, anaerobic bacteria 2726.
 fermentation, metabolites, microorganisms 7652.
 fermentation products, purification, affinity chromatography, reviews 5227.
 flocculation, yeasts 2552.
 fluorometry, measuring techniques, proteins, amines, yeasts, bacteria 7556.
 food fermentation, books, microorganisms 5941.
 food processing industrial wastes, books 4233.
 fuels, production, yeasts, fermentation, methodology, reviews 7803.
 genetic engineering, conferences, books 4250.
 genetic engineering, microorganisms, fermentation, methodology, characterization, books, conferences 8500.
 hepatitis A virus vaccines, attenuation, live 6641.
 immobilization, immobilized cells, organelles immobilization 5101.
 immobilized enzymes 5125.
 lignin, biosynthesis, biodegradation, reviews 3599.
 metabolites, microorganisms 2636.
 metals leaching, microorganisms 6393.
 methanogenesis, China, People's Rep. 6167.
 methanogenesis, USA 6395.
 methanol biodegradation, metabolites, production, reviews, methylotrophic bacteria 5228.
 methodology, industries, microbiology, books 4237.
 microorganisms cell culture, reviews 4970.
 microorganisms, genetic engineering 5206.
 models, automated methods, monitoring 5951.
 patents 8508.
 plant breeding, nitrogen-fixing bacteria, mycorrhizas, books 9339.
 polysaccharides, industrial applications, reviews, bacteria 8622.
 processes, models, books, conferences 3394.
 products purification, ultrafiltration 4145.
 protoplasts, conferences, books 3399.
 protoplasts, conferences, books 5948.
 research programs, books 9338.
 Rhizobium inoculation, Leguminosae 6377.
 surfactants, surfaces interaction microorganisms, reviews 4392.
 use, pulp mills, paper mills, wastewater treatment, production, reviews 8397.
 use, waste treatment, industrial wastes, toxicants, methodology 8398.
 viruses vaccines development, immunological aspects 7483.
 waste treatment, composting, Japan 4923.
 xylose isomerase, reviews, bacteria 2597.

Biotin,

+avidin enhancement enzyme-linked immunosorbent assay, detection, herpes simplex virus, man 4154.
 biosynthesis, media (culture), *Rhizopus delemar* 3579.
 derivatives, biosynthesis, peltaric acid metabolism, *Pseudomonas* 4393.
 growth factors, nutrient requirements, cell culture, reviews, yeasts 7787.
 nutrient availability, intestinal microflora, oral administration, *Lactobacillus acidophilus*+antibiotics, chickens 2750.
 nutrient requirements, lysine production, *Brevibacterium lactofermentum* 6817.
 production, desthiobiotin conversion, *Rhizopus delemar* 964.
Biotyping,
 fermenters, methanogenic bacteria 7305.
 Frankia, relationship nodulation, *Alnus glutinosa* 8157.
 Haemophilus influenzae, Haemophilus parainfluenzae, methodology 737.
 Haemophilus influenzae, methodology 779.
 Haemophilus, methodology 770.
 methodology, *Clostridium difficile*, colitis outbreaks, hospitals, man 1641.
 methodology, *Staphylococcus aureus* 6762.
Biphenyl,
 chemical pollution, biodegradation, rivers 185.
4,4'-Biphenylenedihydrazone-3-(3-methyl)-2-pyrazolin-4,5-diones,
 antifungal activity, *Fusarium oxysporum* f.sp.*lycopersici* 8300.
Biphenyls,
 derivatives, *Rhynchocys suaveolens*, antibacterial activity, *Bacillus subtilis*, *Staphylococcus aureus* 9096.
Bipolaris oryzae,
 brown spot, *Oryza sativa*, pathogenesis 5425.
Bipolaris sorokiniana,
 crater disease, *Triticum aestivum*, soil fumigation+solar radiation effects on 8120.
 leafspot, *Poa pratensis*, ethylene induction leaves chlorosis 8797.
 leafspot, *Triticum aestivum*, disease resistance 5492.
Bipolaris victoriae,
 cordia, spore germination, soil fungistasis, rice bacteria 8966.
 victorin, purification, high-pressure liquid chromatography, U.V. spectroscopy 7810.
Bl-N1,N6-(2,3-dehydroxybenzoyl)aspermidine,
 iron chelating agents, antiviral activity, inhibition, ribonucleoside-diphosphate reductase, herpes simplex virus 1, vesicular stomatitis virus 8335.
Blactediol(methylthio)-acetylarnotin,
 plants growth regulators, structure, biosynthesis, *Aspergillus terreus* 2668.
m-Blauflite,
 effects on *Aspergillus flavus* aflatoxins biosynthesis 7076.
Blitter principle,
 removal, immobilized cells, *Corynebacterium fascians*, nomilin conversion saccharone, fruit juices, *Citrus* 7773.
Blitnness,
 compounds formation, beer fermentation, antifungal agents effects on, yeasts 3587.
 fruit juices, limonin levels, reduction, immobilized cells, *Arthrobaacter globiformis* 5338.
Bituminous materials,
 biodegradation, bacteria, metabolism 1304.
Bivia,
 abundance, water quality indicator species, bacteria 8424.
 viruses carriage, public health risks, aquaculture 2386.
BK virus,
 antibody response, immunoglobulin G, immunoglobulin M, serum levels, radioimmunoassay, methodology 9279.
 immunoelectron microscopy, solid phase methods, cell culture 599.
Black beetle virus,
 plaque assay 7559.
Black pod,
 Phytophthora, maturity effects on, *Theobroma cacao* 7993.
Black point,
 Alternaria alternata, effects on, *Triticum aestivum*, germination 8800.
 Alternaria alternata, fungicides, seed treatments, *Triticale*, effects on 8930.
Black rot,
 Botryospheria obtusa, buds, *Malus sylvestris* 7996.
 Ceratostyxis fibrinaria, effects on, *Ipomoea batatas*, farnesol dehydrogenase 7187.
 Cochliobolus carbonum, races, virulence, genetic variance, recombination, Zea mays, USA, North Carolina 7962.
 Cruciferae, epidemiology, etiology, Thailand 287.
 Cylinodrocladium crotalariae, *Arachis hypogaea*, crop rotation effects on disease resistance 5490.
 Cylinodrocladium crotalariae, fertilizer applications effects on, *Arachis hypogaea* 8772.
 Cylinodrocladium crotalariae, yield reduction, mathematical models, *Arachis hypogaea* 242.
 disease resistance, *Arachis hypogaea* 8105.
 virulence, *Arachis hypogaea* genotypes comparison, plant breeding 8084.
Black shank,
 Phytophthora parasitica var.nicotianae, epidemics, *Nicotiana tabacum* 3830.
Black spot,
 Diplocarpon rosae, disease resistance, plant breeding, *Rosa* 8096.
Black stain,
 Verticilladiella wagneri, *Pseudotsuga menziesii* thinning association 3924.
Black stem,
 Phoma medicaginis, disease resistance, plant breeding, *Medicago sativa* 4572.
Blackeye cowpea mosaic virus,
 infection, incidence, *Vigna unguiculata*, USA, South Carolina 8777.
Blackleg,
 Erwinia carotovora, *Solanum tuberosum* tubers, disease control, heat treatments 1195.
 Erwinia carotovora subsp.atroseptica, disease resistance screening projects, *Solanum tuberosum* 5483.
Solanum tuberosum, disease resistance, *Erwinia carotovora* subsp.atroseptica 2025.
Solanum tuberosum, effects on, growth, yield 2028.
Solanum tuberosum, *Erwinia carotovora* subsp.atroseptica 2027.
Blackline disease,
 cherry leaf roll virus etiology, *Juglans hindisi* 4530.
Blakeslea triparta,
 apotrisporin characterization 6064.
 4-dihydrotrispate B biosynthesis 1849.
Blast,
 Pyricularia oryzae, appressoria penetration, isoprotholane inhibition, *Oryza sativa* 2892.

Blaet, (continued)

- Pyricularia oryzae*, disease control, oxytetracycline, streptomycin, *Oryza sativa* 7215.
Pyricularia oryzae disease resistance, inheritance, *Oryza sativa* 5493.
Pyricularia oryzae, disease resistance, *Oryza sativa* 1128.
Pyricularia oryzae, disease resistance, polygenic inheritance, *Oryza sativa* 6297.
Pyricularia oryzae, RNA, DNA, levels, leaves, *Oryza sativa* 7978.
Pyricularia oryzae, susceptibility, night temperature effects on, seedlings, *Oryza sativa* 7958.

Blastocladiopsis, antibiotics production, screening 528.**Blastodendron aera**

- non-target organisms, granulosis virus biological control effects on, orchards, *Cydia pomonella* 4387.

Blastomycosis

- itraconazole antifungal activity, new records 9104.

Blastomycosis dermatitidis

- antigens extracts, disinfection, thimerosal, formaldehyde, clinical microbiology 810.

Bleomycin

- analogs, DNA cleavage, structure-activity relationships 529.

Blight

- Alternaria helianthi*, virulence, *Helianthus annuus* 8033.
Ascochyta, *Cicer arietinum*, disease control, fungicides 3883.
Ascochyta, *Cicer arietinum*, Pakistan, reviews 3789.
Ascochyta, *Cicer arietinum*, Ethiopia 3790.
Ascochyta, *Cicer arietinum*, India 3792.
Ascochyta, *Cicer arietinum*, reviews 3785.
Ascochyta, *Cicer arietinum*, Spain 3791.
Ascochyta pinodella disease resistance, inheritance, plant breeding, *Pisum sativum* 5477.
Ascochyta rabiei, *Cicer arietinum*, disease control, seed-borne diseases, reviews 3905.
Ascochyta rabiei, *Cicer arietinum*, epidemiology 3786.
Ascochyta rabiei, *Cicer arietinum*, Pakistan, reviews 3789.
Ascochyta rabiei, *Cicer arietinum*, pathogenicity, races 3788.
Ascochyta rabiei, *Cicer arietinum*, screening projects 3787.
Ascochyta rabiei, *Cicer arietinum* susceptibility, factors affecting 1974.
Ascochyta rabiei, disease resistance, germplasm screening, plant breeding, *Cicer arietinum* 8093.
Ascochyta rabiei, disease resistance, plant breeding, *Cicer arietinum* 3864.
Ascochyta rabiei, disease resistance screening projects, *Cicer arietinum* 3863.
Ascochyta rabiei, plant breeding, disease resistance, *Cicer arietinum* 3865.
biological control, *Cryphonectria parasitica* virulence conversion, *Castanea dentata* isolates 6326.
biological control, *Cryphonectria parasitica* virulence conversion, *Castanea dentata* isolates 6327.
Castanea sativa, biological control, *Endothia parasitica* virulence conversion, double stranded RNA elimination 6328.
Citrus sinensis, *Citrus jambhiri*, roots necrosis association, *Fusarium* isolation 1136.
Coffea arabia, disease control, captafol, *Pseudomonas syringae* 4590.
effects on, growth, minerals, uptake, evapotranspiration, *Citrus paradisi* 5439.
Endothia parasitica, hypovirulence strains, temperature effects on growth rate, biological control, *Castanea dentata* 8184.
Endothia parasitica, vectors, *Lehmmania marginata*, *Castanea* 8954.
Endothia parasitica, virulence, biological control, killer factor double-stranded RNA, *Castanea dentata* 8638.
Endothia parasitica, virulence, gene mapping, use biological control, *Castanea dentata* 8183.
Fusarium oxysporum, weeds, disease reservoirs, *Glycine* max 8770.
Fusarium, *Poa pratensis*, association, *Leptosphaeria korrae*, *Philophora graminicola* 5418.
Fusarium solani, relationship soil nutrients, *Citrus* 2003.
Helminthosporium turicum, *Zea mays*, Egypt, Arab Rep. 2792.
Phytophthora capsici, disease resistance, *Capsicum annuum* 5508.
Phytophthora drehsleri, *Cucumis*, China, *Pepino*'s Rep. 7170.
Pseudomonas syringae pv. *glycine*, *Glycine* max, epidemiology 3799.
Pythium aphanidermatum, disease control, metalaxyl, propamocarb, efosite-AI 8134.
Pythium, disease control, agricultural practices, comparison, fungicides, *Phaseolus vulgaris* 1210.
Rhizoctonia, disease control, *Festuca arundinacea*, fungicides 8172.
Sclerotinia minor, *Arachis hypogaea*, South Africa 5410.
Solanum tuberosum, *Pseudomonas solanacearum* inoculation methodology 8871.
Tagetes, *Alternaria tagetica*, pathogenicity 1140.
transmission (seed), *Gossypium hirsutum*, *Gossypium hirsutum* 8037.
Xanthomonas campestris pv. *malvacearum*, disease control, β -lactam antibiotics, *Gossypium hirsutum* 6315.
Xanthomonas campestris pv. *malvacearum*, disease resistance, plant breeding, *Gossypium hirsutum* 2832.
Xanthomonas campestris pv. *malvacearum*, host-pathogen interactions, disease control, plant breeding, reviews, *Gossypium hirsutum* 3846.
Xanthomonas campestris pv. *malvacearum*, pathogenicity, plants 7923.
Xanthomonas campestris pv. *manihoti*, disease resistance, plant breeding, cultivars, *Manihot esculenta* 5497.
Xanthomonas campestris pv. *oryzae*, disease resistance, *Oryza sativa* 6298.
Xanthomonas campestris pv. *phaseoli*, *Phaseolus vulgaris*, symptoms, inheritance 4501.
Xanthomonas campestris pv. *glicicola*, disease resistance, *Vigna unguiculata* 8891.
Xanthomonas campestris pv. *glicicola*, incidences, *Vigna unguiculata* 6231.
Xanthomonas malvacearum, disease resistance, genotypes, *Gossypium arboreum* 8059.

Blasus leucopertus

- biological control, conidia pathogenicity, replication, relative humidity effects on, *Beauveria bassiana* 7766.

Bliet rust

- Cronartium facklandii*, plant breeding, disease resistance, *Pinus* 2870.
Cronartium bicicola, *Pinus monticola*, disease resistance 5595.
pathogens, + roots plant diseases pathogens, association, *Dendroctonus ponderosae*, *Phytophthora fossifrons*, *Pinus monticola*, USA, Idaho 8182.

Bliet spot

- Pseudomonas syringae* var. *populans*, pathology, *Mulm*, Italia, Italy 7161.

Blood

- detoxification, *Escherichia coli* asparaginase, bioreactors, immobilized enzymes 2575.
enzyme-linked immunosorbent assay detection antibodies, endotoxins, gram-negative bacteria 1939.

Blood, (continued)

- heparin removal, use immobilization heparin lyase, *Flavobacterium* 6865.

Blood culture

- acridine orange, staining, detection, bacteria 672.
aerobic conditions, methodology comparison 1626.
anaerobic bacteria identification methodology, man 1583.
anaerobic bacteria, media (isolation) 2482.
analysis, bacteremia diagnosis, acridine orange use 1667.
Bacillus contamination, transmission, role, cotton use disinfection 3223.
bacteria, antibiotic sensitivity testing, *Autobac* test 494.
bacteria, detection, electrical impedance measuring techniques 2484.
bacteria growth detection, bioluminescence, ATP 751.
bacteria staining, methylene blue, acridine orange, Gram stain 703.
bacteria, yeasts, isolation, centrifugation+lysis 1529.
comparison, liquid culture, isolation, methodology, bacteria, fungi 3260.
effects on, *Bacter* test, detection, bacteremia, man 2521.
Enterobacteriaceae, identification, methodology 5053.
Enterobacteriaceae, identification, methodology, comparison 670.
Etiophia, hospitals, clinical isolates, bacteria, antibiotic sensitivity testing 7400.
false-positives, BACTEC test, bacteria contamination, clinical microbiology 704.
glucose addition, *Streptococcus viridans* 2497.
growth, correlation, hypertonicity, antibiotics, *Staphylococcus aureus*, Enterobacteriaceae 783.
Haemophilus influenzae, growth, hemin, NAD, effects on 791.
Histoplasma capsulatum, recovery methodology, centrifugation+lysis 814.
isolates, antibiotic sensitivity testing methodology comparison 2240.
lysis+centrifugation, detection, bacteremia 755.
lysis+centrifugation, isolation, *Mycobacterium chelonae* 1671.
lysis centrifugation, septicemia diagnosis, man 5032.
media, bacteremia detection, *Bacter* test 7572.
media, comparison 7626.
media (culture), bacteremia detection 1604.
methodology, bacteria detection 1663.
microorganisms contamination, quality control 4036.
pathogens growth, comparison bacteria 3352.
positive, detection, use, acridine orange 3267.
recovery, gram-negative bacilli, *Streptococcus* group D, *Staphylococcus aureus*, *Candida* 584.
Salmonella typhi, *Salmonella paratyphi*, sodium polyanethanol sulfonate effects on recovery 1579.
samples volume, detection, bacteremia, fungemia 702.
septicemia diagnosis, Gram stain, subculture, acridine orange staining 3342.
Staphylococcus aureus identification, agglutination tests 1625.
Staphylococcus aureus identification methodology, thermocyclase activity detection 1655.
Streptococcus antigens detection, agglutination methodology 2460.

Blood donors

- hepatitis B surface antigen, detection, radioimmunoassay 1546.

- screening, cytomegalovirus antibodies, methodology comparison 2448.

Blood group O

- antigens, use, *Enterobacter cloacae* serotyping 3296.

Blood transfusion

- disease transmission, hepatitis B, non-A, non-B hepatitis, acquired immune deficiency syndrome, identification, radioimmunoassay, r+thology, man 646.

Blood vessels

- prosthesis, penicillin binding, storage effects on antibacterial activity 2418.

Blotch

- Mycosphaerella kilianii*, *Triticum repens* 8781.
Pseudomonas tolaasi, *Agaricus bisporus*, pathology, phenotyping 4564.
Triticum aestivum, incidence, USA, Michigan, *Septoria nodorum*, *Septoria tritici* 5419.

Blum mold

- Peronospora hyoscyami*, conidia infectivity, overwintering, *Nicotiana tabacum* 8817.

- Peronospora tabacina*, metalaxyl, effects on, *Nicotiana tabacum* 8136.

Blue stain

- Ceratocystis*, isolates, *Notofagus*, characterization 5598.
Ceratocystis minor, hypersensitivity response, seasonal variations, *Pinus ponderosa* 8193.

- Ceratocystis nigra*, effects on water conductivity, *Pinus ponderosa* 8194.

- Ceratocystis penicillata*, *Ceratocystis polonica*, water stress, *Picea abies* 8173.

- Ceratotomyces*, *Pinus caribaea* var. *hondurensis* wood, disease control 6331.

Blueberries

- post-harvest decay, *Colletotrichum gloeosporioides*, *Alternaria*, *Botrytis*, disease control, immersion+captafol 3851.

Bluetongue virus

- antigens detection, immunodiffusion 989.
antigens preparation methodology, use, gel diffusion 3240.
genomes, double stranded RNA, analysis methodology 4148.

Bornavirus

- Bacillus thuringiensis*, pathogenicity, biological control 129.

- larvae, biological control, use, *Bacillus thuringiensis* endotoxins 118.

Body fluids

- Cryptosporidium* neofomans antigens detection, methodology comparison, man 253.
Haemophilus influenzae type b antigens detection, methodology comparison, man 253.

- hemocell, *Glycine dibranchiata*, bactericidal activity, *Serratia marcescens* 451.

- man, *Haemophilus influenzae* b polymyxin phosphate antigens detection, agglutination tests 1584.

Body weight

- chickens, ingestion, feeds+molds, effects on 7014.

Boletaceae

- ectomycorrhizas, ecological distribution, *Pinus sylvestris*, *Betula pubescens*, Finland 2100.

Boletus luridus

- growth, lastanox T20 effects on 8259.

Boll rot

- Colletotrichum capsici*, *Gossypium hirsutum*, histopathology 5453.

Bombyx mori

- viruses inactivators proteins 9113.

Bombyx mori

- biological control, toxicity, *Bacillus thuringiensis* spore crystals, surface net 2660.

Bombyx mori, (continued)

cytoplasmic polyhedrosis virus isolates, antiviral activity, poly (I:C), 2',5'-oligo(A) 473.
 facherie virus detection, latex agglutination 4161.
 viruses inactivators proteins, purification, characterization, electron microscopy 9113.

Books.
 fatty acids, synergism, antagonism, gentamicin, bacteriostasis 4052.

amino acids biosynthesis, gene regulation, microorganisms 3371.
 aminoglycoside antibiotics, antibacterial activity 8498.
 antibiotic resistance, bacteria 9337.
 antibiotics 1691.
 antibiotics, antibacterial activity 8496.
 antibiotics biosynthesis, gene regulation, microorganisms 3374.
 antibiotics, chromatography 6795.
 antibiotics treatment, bacteria infection, man 2538.
 Ascochyta blight, Cicer arietinum 4247.
 Aspergillus, Fusarium, Chaetomium mycotoxins, food contamination, man 6798.
 bacteria, drug resistance, genetic control, conferences 3389.
 bacteria, nitrogen fixation, Leguminosae, interspecific relationships 5094.
 Basidiomycetes culture 3369.
 Basidiomycetes production 4455.
 biodegradation, fungi, bacteria, conferences 1697.
 biological control, crop protection 8494.
 biological control, plant diseases, pathogens, bacteria, fungi, plant viruses 4231.
 biological control, plants pathogens 844.
 biological control, weed control 4249.
 bioactors, fermentation, microorganisms metabolism, immobilized enzymes 1684.
 biotechnology 1690.
 biotechnology, antibiotics production, fermentation, microorganisms, plant cells, cell culture 5091.
 biotechnology, biochemical characteristics, cells 1696.
 biotechnology, genetic engineering, microorganisms, conferences 8500.
 biotechnology, industries, cell fusion, genetic engineering, recombinants, DNA 3367.
 biotechnology processes, models 3394.
 biotechnology, reviews 5093.
 cellulolytic enzymes, cellulose hydrolysis 3386.
 cheese starter cultures 5095.
 clinical isolates detection methodology, microorganisms 3378.
 cloning vectors, yeasts transformation, viruses, transcription translation cell-free systems 842.
 composting, sewage sludge 5090.
 conferences 1697.
 conferences, airborne microorganisms, disease transmission, plant diseases 6797.
 conferences, biological control, fungi, Aphididae 5944.
 conferences, biomass, single-cell protein, production, peat hydrolysates, fungi 7645.
 conferences, biomass, use, energy production 1700.
 conferences, biotechnology 3397.
 conferences, biotechnology, protoplasts 3399.
 conferences, hepatitis B virus vaccines production 6799.
 conferences, microorganisms genetic engineering, use, waste treatment, chemical pollution biodegradation 3392.
 conferences, mycorrhizas, Basidiomycetes, ecological distribution, Arctic, alpine environments 2546.
 conferences, mycotoxins food contamination, mycotoxigenic association, man, animals 7647.
 conferences, nitrogen fixation, genetic engineering, nitrogen-fixing bacteria 3395.
 conferences, plant breeding, disease resistance 3396.
 conferences, plant viruses, fruit trees 3400.
 conferences, protoplasts, biotechnology 5948.
 conferences, single-cell protein production, fermentation, lignocelluloses, whey, nutritive value 2544.
 conferences, vaccines, genetic engineering, viruses 6800.
 Corynebacterium sepeodonicum, immunodiagnosis, fluorescent antibody test, plant diseases 3385.
 crops yield, biotechnology, soil microorganisms 3366.
 disease resistance plant breeding, Africa 9349.
 diseases, ornamental plants, trees 840.
 disinfection, sewage sludge 2542.
 disinfection, sterilization 1695.
 energy production, biomass, biotechnology 4248.
 enzymes, applications, biotechnology, industries, microorganisms 3373.
 enzymes, biotechnology 5098.
 enzymes, microorganisms, industries 839.
 enzymes, preparation, purification, immobilization, stabilization 3375.
 ethanol production, biotechnology 4234.
 ethanol production, biotechnology, yeasts, bacteria 5943.
 ethanol production, xylitol fermentation, fungi 9344.
 fermentation, immobilized cells use, yeasts, conversion, xylitol, cellulose 2539.
 fermentation processes, methodology, equipment 3376.
 food contamination, food spoilage, fermented food production, sterilization 4240.
 food contamination, fungi, mycotoxins 3384.
 food contamination, microorganisms 3368.
 food contamination, microorganisms 4246.
 food fermentation, biotechnology, microorganisms 5941.
 food, microorganisms, bioassays, methodology 9336.
 food processing, industrial wastes, biotechnology 4233.
 Fusarium, plant diseases, mycotoxins, biodegradation, biomass, production, biological control, reviews 7649.
 genetic engineering, biotechnology, fermentation 4250.
 hazardous wastes waste treatment, microorganisms use 1694.
 hepatitis viruses vaccines standardization 4245.
 immobilization, cells, organelles, utilization 9341.
 immobilized cells, characterization, microorganisms 3379.
 immobilized enzymes 850.
 β -lactam antibiotics synthesis 6796.
 meat, spoilage, contamination, bacteria 4242.
 methanogenesis, digestion (anaerobic) 5940.
 methanogenesis, digestion (anaerobic), reactors design, surveys, Europe 7639.
 microbiology, industries, methodology, biotechnology 4237.
 microorganisms, biodegradation 1683.

Books, (continued)

microorganisms, biogeochemistry 8493.
 microorganisms, biosynthesis, antibiotics, steroids, ethanol, sweeteners, polysaccharides 2541.
 microorganisms, ecosystem analysis, interspecies relationships, isolation, media (culture), measuring techniques, reviews 5092.
 microorganisms, immobilized cells 4232.
 microorganisms, infection, seeds, pathology, conferences 3396.
 microorganisms, role, food chains, nutrient cycles, ecological distribution 4238.
 microorganisms, spoilage, meat 1689.
 microorganisms, use, fermentation, products biosynthesis 5096.
 mutagenicity testing, environmental factors, bacteria, phages, conferences 3388.
 Mycoplasma laboratory methods methodology, morphology, ultrastructure, cell culture, identification 3377.
 mycorrhizas, inoculum production, plants response, taxonomy 843.
 mycorrhizas, symbiosis, plants 3382.
 nitrogen fixation, biochemical characteristics, genetic control, nitrogen-fixing bacteria, interaction, plants 9346.
 nitrogen fixation, genetic analysis 3370.
 nitrogen fixation, microorganisms, agriculture, crop fields 9345.
 nitrogen-fixing bacteria, genetic engineering, plants, plant viruses 4243.
 organic compounds biodegradation, reviews 8495.
 organic compounds production, petrochemicals, biomass 3372.
 organic matter, wastes, conversion, biomass, bacteria, fungi, methodology 6793.
 organic matter, wastes, conversion, microorganisms, biomass, production, use, rural populations, rural environments 6794.
 pesticides, pesticide applications, antimicrobial activity, toxicology, nomenclature, chemical analysis 9340.
 petroleum, biodegradation, pollution effects, microorganisms 8497.
 pharmaceuticals, microorganisms, contamination, production, antibiotics, antimicrobial agents, antimicrobial activity 9343.
 phytopathogenic fungi, plant diseases, turfgrass 1688.
 plant breeding, nitrogen-fixing bacteria, mycorrhizas, biotechnology 9339.
 plant diseases, bacteria, diagnosis 4235.
 plant diseases, disease control, epidemiology, plant breeding 1692.
 plant diseases, *Fragaria* 1687.
 plant diseases, pathogens, check lists, phytopathogenic fungi, bacteria, plant viruses, Brunei 7640.
 plant diseases, *Solanum tuberosum*, bacteria, fungi, viruses 3380.
 plant diseases, *Vicia faba* 4236.
 plants genomes, structure-activity relationships, nitrogen fixation, nitrogen-fixing bacteria, plant viruses, host-pathogen interactions 3391.
 polysaccharides, fungi, lichens 3383.
 polysaccharides, industrial applications, microorganisms 9342.
 research programs, biotechnology 9338.
 reviews, viruses microbial pollution, public health risks, standards, environmental monitoring, books 2537.
 Rosa, plant diseases 1686.
 Salmonella typhi, isolation, identification, water, methodology 3332.
 soil microorganisms, biogeochemistry, metals uptake 2543.
 soil microorganisms, rhizosphere interface, electron microscopy, ultrastructure 1693.
 swimming pools, disinfection, sodium hypochlorite 838.
 symbiosis, reviews 845.
 T-2 toxin, trichothecenes 5939.
 trees, mycorrhizas 3381.
 virulence genes, stem rust, *Puccinia graminis* f.sp.tritici, plant breeding, Triticum aestivum 4239.
 wastewater treatment, sewage treatment, microorganisms role 2540.
 yogurt, production, microorganisms role, quality control 5097.

Boophilus microplus, cell lines, growth, African swine fever virus 1545.
Bordetella bronchiseptica, media (isolation), cephalixin containing 7596.
Bordetella pertussis, antibiotic resistance 4710.
 biomass, colorimetry, methodology 9323.
 biomass production, cell culture, continuous culture, use vaccines 9223.
 endotoxins, polysaccharides structure 7124.
 hemagglutinins biosynthesis, media (culture) 9312.
 hemagglutinins purification, vaccines production, immunogenicity 8389.
 hemagglutinins, vaccines production 3176.
 toxins productions 4483.
 toxoids immunogenicity, correlation purification methodology 4891.

Borescope, +mini-rhizotron, observation methods, Phymatotricon omnivorum, host-parasite interactions, Gossypium hirsutum 2926.

Boric acid, disease control, Botryodiplodia theobromae, fruit rot, Citrus reticulata 5525.

Borella, microscopy, use, avidin biotinylated horseradish peroxidase complex 3283.

Botryodiplodia, fruit rot, pathogenicity 7162.

Botryodiplodia theobromae, canker, dieback, pathology, *Pyrus pyrifolia* 8807.
 extracts, biological control, *Phytophthora parasitica* var. *piperina* rot, *Piper* betle 5518.
 fruit rot, Citrus reticulata, disease control 5525.
 fruit rot, post-harvest decay 8876.
 fruit rot, post-harvest decay, oranges, cellulase association 2049.
 seed rot, *Lagerania secarora*, *Cucurbita pepo* 2032.

Botryosphaeria corticis, stem canker, *Vaccinium corymbosum*, *Vaccinium ashei* 5466.
Botryosphaeria dothidea, canker, disease control, benomyl, pruning, *Malus pumila*, USA, Georgia 3900.
 canker, *Malus pumila*, disease resistance 1200.
 hyphae, morphology, *Betula alba*, water stress 4614.
 stem canker, *Rubus* 8841.
 wound infection, pruning, disease control, benomyl+captan, *Prunus persica* 8913.

Botryosphaeria obtusa, black rot, buds, *Malus sylvestris* 7996.
 canker, *Rubus*, USA, Ohio 8846.
 infection, *Malus domestica*, buds 4527.

Botryosphaeria ribis, Eucalyptus marginata canker, pathology 370.
 infection susceptibility, relationship fruits chemical composition, *Malus pumila*

Botryosphaeria ribis, (continued)

2799.
wound infection, pruning, disease control, benomyl+captan, *Prunus persica* 8913.
- Botryosphaeria vaccinii**,
latent infection, *Vaccinium macrocarpon*, pathology, association, dew temperature 8041.
- Botrytis**,
infection, *Allium cepa*, ozone effects on 8000.
post-harvest decay, disease control, immersion+captafol, blueberries 3851.
- Botrytis allii**,
bulb rot, fungicides, disease control, *Allium cepa* 326.
neck rot, post-harvest decay, harvesting, drying effects on, onions 8055.
rot disease resistance, plant breeding, *Allium cepa* 5479.
- Botrytis cinerea**,
activators, effects on volatiles production, must fermentation, wine 3608.
antifungal activity, sodium docetylbenzene sulfonate, disease control,
post-harvest decay, tomatoes 8054.
autoradiography, silver bioaccumulation, conidia 8484.
bunch rot, *Vitis vitifera*, factors affecting pathogenesis 2041.
captan resistance, detoxification, glutathione 8297.
decomposition, L-tartronic acid, L-malic acid, musts, organoleptic evaluation,
wine 8666.
disease resistance, inheritance, *Rubus idaeus* 3669.
esterase activity detection, role, fermentation, wine aroma 4410.
etiology, infection, *Vicia faba* 1970.
grey mold, disease control, fungicides, *Fragaria chiloensis* 7214.
grey mold, *Phaseolus vulgaris*, pathogenesis association developmental stages,
environmental effects 1114.
host-pathogen interactions, in vitro growth, plant cells monosaccharides 7125.
infection, *Allium cepa*, ozone effects on 8000.
infection barriers, *Rubus idaeus*, histology 8015.
β-ketone, derivatives, retinol, antifungal activity 6491.
1,4-naphthoquinone derivatives antifungal activity 9103.
protection, fermentation, musts, pesticide residues, fungicides 3601.
shoot blight, fungicides, disease control, *Pistacia vera* 2896.
- Botrytis fabae**,
chocolate spot, *Vicia faba*, pectinolytic enzymes, phytotoxins, effects on
pathogenesis 3794.
infection, *Vicia faba*, humidity effects on pathogenesis 5413.
etiology, infection, *Vicia faba* 1970.
- Botrytis squamosa**,
infection, *Allium cepa*, ozone effects on 8000.
- Bottles**,
beverages, spoilage, microorganisms, reviews 7872.
methodology comparison, recovery, aerobic bacteria, anaerobic bacteria, clinical
isolates 5038.
- Botulism**,
food poisoning, seafood 4486.
- Bovine diarrhoea-mucosal disease virus**,
antibodies, detection, immunoperoxidase test, neutralization, pigs 6743.
assays, use, poly(I-C) 5890.
detection, microscopy, antisera+horseradish peroxidase conjugate stains 4147.
- Bovine leukemia virus**,
antibodies detection, comparison, radiolimmunoassay, immunodiffusion 3256.
- Bovine rhinotracheitis virus**,
antiviral activity, ammonium-5-tungsto-2-antimonate 6471.
antiviral activity, 9-(2-hydroxyethoxymethyl)guanine 6476.
assays, use, poly(I-C) 5890.
plaque assay, tissue culture systems 4155.
- Bovine serum albumin**,
removal, activated sludge 2357.
- Bradyrhizobium**,
nitrogen fixation, agriculture, crop fields 9345.
nodules, *Vigna unguiculata* 6364.
- Bradyrhizobium japonicum**,
agglutination, *Glycine max* lectins 3953.
association, *Glycine max*, sulfur dioxide, nitrogen dioxide, effects on, growth
8992.
bacteroids, denitrification pathway, nodules, in vitro, *Glycine max* 8995.
bacteroids, metabolites uptake 6365.
biochemical characteristics, modulation, *Vigna unguiculata*, *Cajanus cajan* 5664.
capsules polysaccharides, attachment mechanisms, plants roots 7275.
carbon dioxide effects on nitrogenase activity, ribulosebiphosphate carboxylase
mediation 7280.
cosmids, hydrogen uptake, optimization, nitrogen fixation 8996.
effects on nodulation *Glycine soja*, cloning DNA sequence, root hairs 6365.
growth, autotrophy, hydrogenase isolation, characterization 3461.
hydrogenase components, nickel 6826.
inoculation, effects on seeds yield, nitrogen, genetic variance, inheritance,
Glycine max 5660.
inoculation, nitrogen fixation, nodulation, herbicides, fungicides seed
treatments effects on, *Glycine max* 8998.
nitrogen fixation, inhibition, nitrogen-15 translocation, leaves, seeds, *Glycine
max* 6370.
nodulation, *Glycine max*, interspecific relationships, regulation 8997.
nodulation *Glycine max*, nitrogen fixation, infection, bean pod mottle virus,
soybean mosaic virus, effects on 7140.
nodulation, *Glycine max*, relationship, rhizosphere, response 4641.
nodulation, infection, light inhibition, coryledons, *Glycine max* 8248.
nodulation, nitrogen fixation, chlormequat chloride, gibberellins roots levels,
effects on, *Glycine max* 8242.
nodulation, penicillin sensitivity, *Glycine max* roots 5655.
nodules, *Glycine max* 6362.
population levels, rhizosphere, straw soil amendment effects on, *Glycine max*
7282.
rhizobitoxine, role, protection, *Glycine max*, charcoal rot, *Macrophoma
phaseolina* 4509.
rhizosphere colonization, stimulation, seed treatments,
streptomycin+erythromycin+benomyl, *Glycine max* 9017.
root hairs symbiosis, *Lotononis bainesii*, host plants, role lectins 6382.
seeds inoculation, nodulation, planting, *Glycine max* 6352.
strains, inoculum, *Glycine max* nodulation, nitrogen fixation, seeds, protein
composition 8247.
symbiosis, *Glycine max*, nodules, α-D-galactosidase, α-D-glucosidase 6363.

Bran,

- fungi flora contamination, counting methods 2052.
- Branches**,
Quercus robur, fungal flora 7218.
- Brandy**,
fermentation, ethanol, yeasts, lactic acid bacteria 5279.
- Branhamella catarrhalis**,
antibiotic sensitivity testing 9163.
drug sensitivity testing, in vitro 9087.
oxidation fermentation media, acid production detection 1658.
- Branhamella catarrhalis testing**,
clinical isolates, β-lactamase, antibiotic sensitivity testing 3092.
- Brassica actinophylla**,
leafspot, *Alternaria panax* 5450.
- Brassica**,
damping-off, downy mildew, disease control, seed treatments 8141.
disease resistance, antifungal agents, disease control, clubroot, *Plasmodiophora
brassicae* 8912.
genotypes, pathogenicity, *Plasmodiophora brassicae* 1157.
leaves infection, cytokinins secretion, pathogenesis, *Alternaria brassicicola*
8028.
Leptosphaeria maculans pathogenicity 1972.
Peronospora parasitica infection, pathogenesis, epidemiology 2022.
plant diseases, beet western yellows virus, Israel 4539.
seeds, isolation, *Xanthomonas campestris* pv. *campestris*, media (selective) 4199.
- Brassica campestris**,
patch, *Rhizoctonia solani*, surveys, soils (calcareous) 255.
plant breeding, germplasm, disease resistance 8065.
seedlings, downy mildew, *Peronospora parasitica*, turnip mosaic virus disease
resistance, genetic analysis 2865.
tobacco streak virus isolation, characterization, host range 4565.
- Brassica caulorapa**,
quality, sewage sludge fertilizer applications, nitrogen cycle 2997.
- Brassica chinensis**,
ribgrass mosaic virus detection, paper enzyme immunoassay 1147.
- Brassica kaber**,
host range, *Spiroplasma citri* 4557.
- Brassica napus**,
cultivars, post-pathogen interactions, stem canker, *Leptosphaeria maculans* 8040.
cultivars susceptibility, stalk rot, *Phoma lingam* 2814.
disease resistance inheritance, *Brassica oleracea*, *Plasmodiophora brassicae
clubroot* 300.
inheritance Ac7 locus, association white rust, *Albugo candida* disease resistance
2854.
seeds, oils extraction, proteolytic enzymes, *Bacillus subtilis* 3494.
stalk rot, *Phoma lingam*, *Sclerotinia sclerotiorum*, disease control, vinclozolin
2903.
- Brassica oleracea**,
disease resistance inheritance, *Brassica napus*, *Plasmodiophora brassicae clubroot*
300.
Plasmodiophora brassicae clubroot, solar radiation disease control 292.
root rot, *Phytophthora megasperma*, disease control, metalaxyl 1225.
- Brassica oleracea var. botrytis**,
root rot, *Phytophthora megasperma*, USA, Oregon 5468.
- Brassica oleracea var. capitata**,
clubroot, role, *Plasmodiophora brassicae*, detection, irrigation systems sediments
3820.
root rot, *Phytophthora megasperma*, USA, Oregon 5468.
- Brassica pekinensis**,
turnip yellow mosaic virus, infection, effects on, starch, accumulation 8863.
- Brassica rapa**,
Plasmodiophora brassicae clubroot, solar radiation disease control 292.
protoplasts, turnip rosette virus RNA replication 2045.
- Brazil**,
composting 9237.
cineame max, bud blight, cowpea severe mosaic virus 6228.
rivers, water pollution, fecal coliforms 7535.
water pollution, *Escherichia coli* isolation 4950.
- Bread**,
baking, heat penetration, survival, microorganisms 6986.
production, fermentation, yeasts 5332.
- Bread milk**,
heat treatments, microorganisms contamination, nutritional status, immune status,
infants, man 7038.
- Breeding**,
disease resistance, *Avena sativa*, *Erysiphe graminis* f.sp. *avenae* powdery mildew
307.
disease resistance, *Hordeum vulgare*, *Puccinia hordei* leaf rust 301.
disease resistance, *Lactuca sativa*, *Bremia lactucae* downy mildew 295.
disease resistance, *Tulipa*, *Fusarium oxysporum* f.sp. *tulipae* bulb rot 299.
- Brefeldin A**,
biosynthesis, comparison fatty acids biosynthesis, stereochemistry, *Penicillium
brefeldianum* 8378.
- Bremia lactucae**,
downy mildew, disease resistance breeding, *Lactuca sativa* 295.
downy mildew, disease resistance, cultivars, *Lactuca sativa* 3841.
downy mildew, disease resistance induction, *Lactuca sativa* 308.
downy mildew, disease resistance inheritance, *Lactuca sativa*, field trials 303.
downy mildew, *Lactuca sativa*, hypersensitive response 6304.
downy mildew, *Lactuca sativa*, virulence, geographical distribution, Australia
3835.
virulence genes, sexual reproduction, recombination, linkage, host-pathogen
interactions, disease resistance genes, *Lactuca sativa* 2840.
- Breast**,
antifungal activity, *Macrophoma mangifera* 4587.
- Brettanomyces naardenensis**,
xylose fermentation, ethanol production 5285.
- Brevibacterium**,
acetone nitrile biodegradation, nitrilase, amidase 3665.
acid, nitriles conversion, organic acids production, factors affecting 4271.
L-lysine biosynthesis 3405.
media (culture), lysine production 6769.
media (culture), nutrient requirements 5061.
organic acids production, nitriles conversion 3433.
- Brevibacterium ammoniagenes**,
IMP biosynthesis, antibiotics stimulation 115.

- revibacterium ammoniagenes**, (continued)
IMP biosynthesis, antibiotics stimulation 952.
IMP production, Tween stimulation 4371.
5-inosinic acid biosynthesis 8062.
5-inosinic acid biosynthesis, antibiotics effects on 6063.
manganese, deficiency, effects on, DNA biosynthesis, precursors, nucleotides, fermentation 951.
membrane permeability mutants, IMP excretion 7765.
mutants, inosine production, ribonucleosides metabolism 5207.
urease, purification, characterization 8569.
- revibacterium divaricatum**,
glutamic acid production, fermentation, optimization, mathematical models 5964.
revibacterium flavum,
aspartic acid production, deficient mutant, pyruvate kinase 7661.
homoserine biosynthesis 3436.
homoserine biosynthesis, threonine effects on 857.
immobilized cells, fumarate hydratase activity 75.
immobilized cells, fumarate hydratase activity stability 3443.
lysine biosynthesis, respiration (cyanide insensitive) 4267.
lysine production, association pyruvate kinase 1728.
L-lysine production, nitrogen sources, flour, *Psophocarpus tetragonolobus* 7670.
lysine production, respiration (cyanide insensitive), chemostats 7669.
pyruvate kinase deficient mutant, lysine production 8527.
- revibacterium lactiofermentum**,
amino acids overproduction mutants, transformation 5116.
lysine production, biotin nutrient requirements 6817.
- revibacterium liniae**,
bacteriocinogeny 6550.
L-phenylalanine conversion, phenethyl alcohol production, cheese ripening 6993.
- revibacterium maris**,
bacteriocinogeny 6550.
- reweries**,
detection, *Saccharomyces diastaticus*, methodology 5296.
enzymes, ethanol fermentation 161.
hygiene, sterilization, disinfection 7547.
industrial effluents, activated sludge, wastewater treatment 4091.
industrial effluents, digestion (aerobic), Candida 6701.
industrial effluents, incidence, Protozoa, Metazoa 3208.
industrial effluents, wastewater treatment, chemical oxygen demand 3201.
mash fermentation, enzymes, microorganisms 163.
wastewater treatment, industrial wastes, reviews, bibliographies 4913.
- rewing**,
beer, wort fermentation, yeasts 984.
by-products, extracts, *Saccharomyces cerevisiae* 201.
conferences 1698.
conferences 1699.
culture collections, patents, microorganisms 6934.
fermentation, biotechnology, genetic engineering, conferences 3390.
fermentation, protoplast fusion, *Saccharomyces carlsbergensis* 2687.
genetic engineering, *Saccharomyces cerevisiae* 3628.
levels, zinc, copper, fermentation, yeasts 6128.
yeasts, beer maturation, use, *Lactobacillus casei* acetoacetate decarboxylase 7800.
- ricea**,
cheese, filtration, removal yeasts, bacteria 192.
- ritish isles**,
Berberis, *Pseudomonas syringae* pv. *berberidis* etiology, leafspot, leaf fall 8873.
dental caries, fluoridation, children 8431.
dental caries, fluoridation effects on epidemiology, children 7555.
forests, *Fagus sylvatica*, *Quercus petraea*, litter fall decomposition 352.
Fusarium infection, *Medicago sativa*, epidemiology 1571.
Gramineae, incidence, wilt, *Xanthomonas campestris* pv. *graminis* 4521.
plant diseases, roots, plant viruses, vectors, *Polymyxa betae* 7190.
Pseudomonas aeruginosa antibiotic resistance, surveys 9059.
reservoirs, coliforms concentrations, models analysis 2401.
Rhizoctonia solani pathogenicity, *Solanum tuberosum* 2021.
Fusarium infection, methodology, mycotoxins food contamination, animals feeds 7047.
Septoria cucurbitacearum, leafspot, *Cucurbita pepo*, new records 5452.
- little root disease**,
Spiroplasma citri, cauliflower mosaic virus, turnip mosaic virus, infection effects on, *Armoracia rusticana* 8020.
spores, vacuum packaging, nitrogen packaging, luncheon meat 8715.
- rodiprimin**,
antibacterial activity, *Shigella flexneri*, *Shigella sonnei* 1333.
- romasli**,
inhibition nitrification, biodegradation, soil microorganisms 3969.
- rome mosaic virus**,
disease transmission, urediniospores, *Puccinia graminis* f.sp. *tritici*, *Puccinia recondita* f.sp. *tritici*, leaf rust, stem rust, *Triticum aestivum* 2789.
infection, *Commeleina diffusa*, *Commeleina communis*, pathogeny, *Lama sexpunctata* vectors 284.
infection effects on disease resistance, rust, *Triticum aestivum* 263.
transmission (seed), detection, immunodiffusion, enzyme-linked immunosorbent assay, immunoelectroblotting, seeds, *Triticum aestivum* 8787.
urediniospores, disease transmission, *Puccinia graminis* f.sp. *tritici*, stem rust, *Triticum aestivum* 2790.
- romelain**,
cleavage, influenza A virus hemagglutinin isolation, density gradients centrifugation 4994.
coagulants, soybean milk curd, fermentation, *Penicillium caseicola* 7852.
- romide**,
Actinosporangium vitaminophilum pyrrolomycin F derivatives biosynthesis, antibacterial activity, antifungal activity 2295.
Bromo-2-chloro-1,1,1-trifluoroethane, litter fall decomposition 352.
effects on, replication, viruses 6474.
- Bromo-2-chloro-5,5-dimethylhydantoin**,
chemical control, Legionella pneumophila contamination, cooling towers 7531.
- (Bromocetyl)-amino phenyl arsenoxide**,
inhibition, pyruvate dehydrogenase (lipamide) dihydrolipoamide acetyltransferase dihydrolipoamide dehydrogenase complex activity, histidine residues role, *Escherichia coli* 3522.
- D-p-Bromobenzoylmeleagrin**,
isolation, *Penicillium meleagrinum*, X-ray crystallography 8375.
- 2-Bromoethanesulfonate**,
inhibition, methanogenesis, acetic acid, digestion (anaerobic) 7524.
- Bromophenoxim**,
antibacterial activity, *Streptomyces* soil isolates 4737.
- Bromopyruvic acid**,
inhibition, [pyruvate dehydrogenase (lipamide)]kinase active sites activity, *Escherichia coli* 2623.
- 5-(2-Bromovinyl)-2'-deoxyuridine**,
analogs antiviral activity, herpes simplex virus 1 4763.
antiviral activity, Epstein-Barr virus, infection, lymphoblastoid cell lines 4027.
- sensitivity relationship, herpes simplex virus 1 thymidine kinase phosphorylation 2225.
- antiviral activity, herpes simplex virus 1 protein biosynthesis 5743.
- antiviral activity, thymidine inhibition, herpes simplex virus 1, kinetics 460.
sensitivity, comparison, immunofluorescence, monoclonal antibodies, serotyping, herpes simplex virus, methodology 655.
sensitivity, herpes simplex virus 1, herpes simplex virus 2, media (isolation), cell culture, clinical microbiology 607.
- Bromus inermis**,
silage, proteolysis 1068.
- Bronchoscopes**,
disinfection 578.
fiberoptics, *Mycobacterium tuberculosis* contamination, disinfection 3221.
- Broussonetia kazinoki**,
bark, retting, pectinolytic enzymes, *Erwinia carotovora* 7680.
- Brown patch**,
Rhizoctonia, pathogenesis, *Stenotaphrum secundatum* 1127.
Rhizoctonia solani, *Rhizoctonia* biological control, *Agrostis palustris* 6308.
- Brown rot**,
decay fungi, vanillic acid, syringic acid, metabolism, association, lignin, biodegradation 2705.
Lycopodium esculentum roots, *Pyrenochaeta lycopersici* isolation, identification
- Poria* placenta, carboxydrates degradation enzymes 6820.
Poria placenta, hydrogen peroxide, free radicals, biodegradation, cellulose 6173.
post-harvest decay, *Monilia fructicola*, fruits, biological control, *Bacillus subtilis* 8053.
wood decay, *Coniophora cerebella*, *Poria vaporaria*, *Gloeophyllum abietinum*, *Pinus* 8947.
- Brown rust**,
Puccinia hordei, *Hordeum vulgare*, pathogenesis 5424.
Puccinia recondita, disease resistance, inheritance, *Triticum aestivum* 2836.
Puccinia tritica, disease resistance, *Triticum aestivum* 5486.
- Brown spot**,
Alternaria alternata, disease resistance, inheritance, plant breeding, callus culture, *Nicotiana glauca* 317.
Bipolaris oryzae, pathogenesis, *Oryza sativa* 5425.
Helminthosporium oryzae, *Oryza sativa* seedlings, disease control, phytoalexins inducers 3887.
Oryza sativa seedlings, heavy metals salts effects on disease resistance, *Drechslera oryzae* 2077.
Scirpina acicola, *Pinus ponderosa* disease resistance, analysis methodology 3925.
- Brucella**,
agglutination, centrifugation effects on, clinical microbiology 699.
antigens, identification, agglutination 6759.
- Brucella abortus**,
antibodies detection, enzyme-linked immunosorbent assay methodology, pigs serum 5063.
antigens, agglutination, Rose Bengal plate test, immunodiagnosis, brucellosis 7589.
antigens, detection, enzyme-linked immunosorbent assay 6763.
vaccination, tests comparison, complement fixation, hemolysis, cattle 1582.
- Brucella ovis**,
antibodies, sheep, complement fixation comparison enzyme-linked immunosorbent assay, detection 4204.
- Brucellosis**,
diagnosis, Coomb's test, titration methodology 784.
immunodiagnosis, Rose Bengal plate test, antigens, agglutination, *Brucella abortus* 7589.
- Brugulera gymnorhiza**,
bark, nitrogen-fixing bacteria, *Brugulera gymnorhiza* 2098.
- Brunel**,
plant diseases, pathogens, check lists, phytopathogenic fungi, bacteria, plant viruses, books 7640.
- Bryonia dioica**,
plant extracts, antiviral activity, poliovirus 2 8325.
- Buckeye rot**,
Lycopodium esculentum, soil moisture effects on pathogenesis, *Phytophthora parasitica* 5458.
- Bud blight**,
covepa severe mosaic virus, *Glycine max*, Brazil 6228.
- Bud rust**,
Picea, pathogenesis, *Chrysomya trifloronini* 5580.
- Budding**,
measles virus, inhibition, role, trifluoperazine, chlorpromazine 471.
- Buds**,
Botryosphaeria obtusa, black rot, *Malus sylvestris* 7996.
Malus domestica, *Botryosphaeria obtusa* infection 4527.
proliferation, plant viruses infection, *Scaphytopius cautus* disease transmission, *Glycine max*, USA, Louisiana 4510.
- Buergeneria sparina**,
biomass, measuring techniques, glucosamines levels 6791.
- Buffaloes**,
carcasses, *Salmonella*, *Staphylococcus aureus* 6199.
cervical microflora, antibiotic resistance 2205.
milk, cream production, *Streptococcus lactis*, dairy starters, flavorings 2736.
milk, isolation, p-casein, casein, substrates, *Aspergillus glaucus*, aflatoxins biosynthesis 7078.
milk, yogurt, dairy starters, *Lactobacillus bulgaricus*, *Streptococcus thermophilus* 6989.
toxicity, pathogenesis, feeds, *Saccharomyces cerevisiae* single-cell protein 1071.

Subject Index

- Butters,**
phosphate, media (culture), effects on, lactic acid bacteria, *Streptococcus*,
antibiotic resistance 5708.
- Buto,**
cell lines, growth, African swine fever virus 1545.
- Buildings,**
biodegradation, microorganisms levels 2720.
feeds, storage, isolation, fungi pathogens 592.
insulation foams, biodegradation, decay fungi, Basidiomycetes 7243.
materials, preservatives, polyvinyl acetate, biodegradation, fungi 6394.
water-borne diseases, epidemiology, Legionella 4933.
wood preservatives, pentachlorophenol, inhibition, decay fungi 7242.
- Bulb rot,**
Botrytis allii, fungicides, disease control, *Allium cepa* 326.
Fusarium oxysporum f.sp.tulipae, disease resistance breeding, Tulipa 299.
- Bulgaria,**
powdery mildew, *Erysiphe graminis*, incidence, effects on, yield, Triticum
aestivum 7959.
soil types, biological properties, soil microorganisms role 2925.
- Bulking agents,**
bires, composting, sewage sludge, aeration 4082.
- Eunch rot,**
Vitis vinifera, factors affecting pathogenesis, *Botrytis cinerea* 2041.
- Bunt,**
Neovossia indica, association, loose smut, *Ustilago nuda* var.tritici, pathology,
Triticum aestivum 8799.
Neovossia indica, pathogenesis, Triticum aestivum 8801.
Neovossia indica, Triticum aestivum, characterization 3808.
Tilletia foetida, virulence, races, Triticum aestivum, Pakistan 7965.
- Bunyavirus,**
antibodies detection, hemolysis methodology 4164.
antiviral activity, synergism, selenazofurin, tazofurin, ribavirin 9117.
- Burn infection,**
man, bacteria microflora, antibiotic sensitivity testing 3084.
- Burning,**
anesthesia, apiculture, Langermannia wahlbergi, Apis mellifera 4230.
ecore on ectomycorrhizas association, Pseudotsuga menziesii 7231.
forest practices, effects on nutrient cycles, soil microorganisms, litter, forest
floor, Pinus ponderosa forests 8932.
forests fires, effects on soil microorganisms 7221.
- Burns unit,**
Staphylococcus aureus epidemics, environmental conditions, man 2410.
- Butylic stunt,**
Mycoplasma, vectors host range, Dabulbus longus 7960.
- 2-But-1,3-dienyl-3-hydro-4-(penta-1,3-dienyl)-tetrahydrofuran,**
biosynthesis, Chaetomium coarctatum 3532.
- 1,4-Butadiene,**
polymers, biodegradation, Moraxella 6163.
- 2,3-Butanediol,**
production, aeration, glucose nutrient concentrations, Klebsiella pneumoniae
3547.
production, fermentation, wood hydrolysates, acids pretreatment, Clostridium
acetobutylicum, Klebsiella pneumoniae 5220.
production, glucose fermentation, Bacillus polymyxa 7782.
production, hemocelluloses fermentation, Bacillus polymyxa 5223.
production, Klebsiella pneumoniae, sugars utilization, hydrogen fluoride,
hydrolysis, wood, Populus tremuloides 8632.
production, lignocelluloses hydrolysis, cellulase activity, Klebsiella pneumoniae
5274.
production, pentoses conversion, Klebsiella pneumoniae 3597.
production, starch degradation, Aeromonas hydrophila 5226.
production, xylene conversion, Klebsiella oxytoca 5262.
- 2,3-Butanedione,**
flavor compounds, biosynthesis, isoleucine-valine operon, gene regulation,
cloning, Saccharomyces cerevisiae 7797.
flavor compounds, production, dairy industry, immobilized cells, Streptococcus
lactis subsp.diacetylus 6892.
levels, malolactic fermentation, wine, Leuconostoc oenos 2693.
- Butanol,**
acetone production, Clostridium acetobutylicum 142.
biosynthesis, enzymes levels, Clostridium acetobutylicum 859.
Clostridium acetobutylicum production, mathematical models 976.
fermentation, hydrogenase activity, carbon monoxide inhibition, Clostridium
acetobutylicum 8646.
fermentation, inhibition levels, Clostridium acetobutylicum 962.
levels, measuring techniques, gas chromatography, fermentation, Saccharomyces
cerevisiae 3581.
production, bioreactors, Clostridium acetobutylicum 5244.
production, cellulose fermentation, Clostridium acetobutylicum 5111.
production, Clostridium acetobutylicum 5237.
production, continuous culture, Clostridium acetobutylicum 961.
production, crop residues fermentation, Clostridium acetobutylicum 7832.
production, effects on membrane fluidity, lipid composition, Clostridium
acetobutylicum 1847.
production, fermentation, Clostridium acetobutylicum 140.
production, fermentation, continuous culture, Clostridium thermosaccharolyticum
3578.
production, fermentation, wood hydrolysates, acids pretreatment, Clostridium
acetobutylicum, Klebsiella pneumoniae 5220.
production, glucose fermentation, batch culture, Clostridium acetobutylicum 4383.
production, glucose fermentation, Clostridium 5236.
production, immobilized cells, reviews 3575.
production, pentoses conversion, bacteria 3598.
production, petrochemicals, biomass 3372.
production, sporulation relationship, Clostridium acetobutylicum 7784.
production, whey conversion, Clostridium acetobutylicum 4381.
production, whey fermentation, Clostridium acetobutylicum 3546.
- n-Butanol,**
production, cellulose fermentation, Clostridium 6150.
- 1-Butanol,**
production, extraction, fermentation 5258.
production, glucose fermentation, Clostridium cochlearium, Clostridium
tetranorum 8648.
- Butea monosperma,**
seeds oils, antimicrobial activity, phytopathogenic fungi, bacteria 4782.
- Butea monosperma,**
Phoma minuta infection 8017.
- Bu. zoi,**
fungicides, disease control, leaf rust, stripe rust, triticum aestivum 2904.
- n-Butylamine,**
pretreatment, Zea mays crop residues, fermentation, Chaetomium cellulolyticum
183.
- Butylated hydroxyanisole,**
antibacterial activity, capsules, corn oils, effects on 6450.
antimicrobial activity, antioxidants, food, reviews 8717.
effects on fungi spores, germination, growth, thermal injury 1072.
stabilization, amphotericin B, antifungal activity, Candida albicans 1406.
- Butylated hydroxytoluene,**
antimicrobial activity, antioxidants, food, reviews 8717.
- 2,3-Butylene glycol,**
production, fermentation, lactic acid bacteria 5240.
production, whey fermentation, Klebsiella pneumoniae, Enterobacter aerogenes
2643.
- Butyribacterium methylotrophicum,**
media, use, titanium(III) nitritriacetic acid 769.
metabolism, carbon monoxide, carbon dioxide, methanol, fuels production 5312.
organic acids production, conversion, methanol, carbon monoxide 3418.
- Butyric acid,**
biosynthesis, enzymes levels, Clostridium acetobutylicum 859.
production, cellulose fermentation, Clostridium acetobutylicum 5111.
production, enzymes metabolism, Clostridium acetobutylicum 5113.
- n-Butyric acid,**
production, cellulose fermentation, Clostridium 6150.
- Butyrylvibrio fibrillosus,**
growth, fermentation, chetomin, effects on 2315.
- Butyryl-CoA dehydrogenase,**
substrate specificity, kinetics, Megaspheera elsdensis 3460.
- By-products,**
sulfate, sulfur production, Chlorobium thiosulfatophilum 3977.
- Byssosclimias nivea,**
biomass, patulin biosynthesis, factors affecting 6207.
patulin production, factors affecting 1926.
- C.D.,**
bacteriorhodopsin pigments, purple membranes, Halobacterium halobium 4257.
chlamydomonas-like conformation 2305.
cytochrome P-450 CAM, Pseudomonas putida 1773.
ferredoxin multiple forms, Desulfotribia africanus 3407.
gramicidin A, peptide synthesis 3141.
lysocholinolipase isoenzymes, penicillium notatum 7685.
lysozyme, Streptomyces rugosus 3458.
nitrogenase, molybdenum iron proteins, cofactors, Klebsiella pneumoniae 5141.
phalloidin, thioesters cross-linking, conformation, Amanita phalloides 3755.
thermal denaturation, subtilisin inhibitors, Streptomyces 7674.
tryptophan, cysteine residues role, gene 32 protein binding DNA, phage T4 4259.
- C-type virus,**
xenotropic New Zealand black mouse cell lines, detection, use, fluorescence
assays, micromethods 620.
- C/N Ratios,**
monitoring, composting, sewage sludge 5841.
soil microorganisms, biomass, soil pH calcium oxide soil amendment effects on
2998.
- Cabbage,**
fermentation, lactic acid bacteria 5330.
- Cacao,**
beans, fungi contamination, ionizing radiation antifungal activity 4588.
- Cadeng-cadeng disease viroid,**
detection, Cocos nucifera, leaves 3824.
- Cadaverine,**
marine bacteria, biodegradation, sea water, media (culture) 3676.
- Cadmium(II),**
activation enzyme, kinetics, dissociation, yeasts 3485.
- Cadmium,**
biocumulation, immobilized cells, Citrobacter 5690.
biocumulation, polysaccharides adsorption, Zoogloea ramigera 3973.
+ coupling factor 1 complex, reaction mechanisms, structure, thermophilic bacteria
895.
inhibition, ectomycorrhizas, roots colonization, Picea sitchensis 8168.
Klebsiella aerogenes capsule polymers binding, activated sludge 6679.
oxides, inhibition Rhizobium leguminosarum var.trifolii nodulation, Trifolium
7294.
pollution, bacteria biodegradation, resistance 3680.
resistance, relationship β -lactamase levels, clinical isolates,
Staphylococcus aureus 2203.
soil pollution, effects on soil microorganisms biodegradation glucose,
calorimetry 2933.
soil pollution, self-purification, soil microorganisms 4633.
toxicity, bacteria, soil amendment 4675.
uptake, activated sludge, EDTA effects on 3192.
- Cadmium chloride,**
salts, anions, susceptibility, Mycobacterium avium, Mycobacterium intracellulare,
Mycobacterium scrofulaceum 3043.
- Cadra figuilella,**
biological control, virulence, granulosis virus, nuclear polyhedrosis virus 6904.
- Casaspallia gilliesii,**
powdery mildew, Leveillula taurica, incidence, USA, Arizona 8035.
- Casaspallia spinosa,**
tannins, gallic acid production, Klebsiella pneumoniae, Corynebacterium 5106.
- Caffeic acid,**
antiviral activity, herpes simplex virus 464.
inhibition, corn, spore germination, Pycnaricia oryzae, superoxide, free
radicals, role disease resistance, plant diseases 8889.
- Caffeine,**
inhibition, aflatoxins biosynthesis, Aspergillus parasiticus 7040.
role, aflatoxins biosynthesis inhibition, Aspergillus parasiticus 218.
- Cajanus cajan,**
disease resistance plant breeding 8899.
diseases, crop production, economic importance, Asia, Africa, North America,
South America 7139.

Cajanus cajan, (continued)

- inoculation, *Glomus fasciculatum* + Rhizobium, + phosphate 2945.
leaf-roll, Rhizobium 6232.
modulation, *Bradyrhizobium japonicum* 5664.
- Caedium hortulanum**,
leaves, mycoplasma-like organisms infection, electron microscopy 1163.
- Calcium**,
+algin, *Zymomonas mobilis* immobilized cells, ethanol production 2675.
cations, effect on streptomycin antifungal activity, *Phytophthora infestans* 7379.
concentration, effects on *Tetrahymena* elegans pectinolytic enzymes activity, biodegradation, *Alnus* leaves 1002.
effects on *Lactobacillus bulgaricus* survival, freezing, freeze drying 4457.
effects on Rhizobium leguminosarum var. trifolii inoculation, nodulation, Trifolium repens 7278.
effects on Rhizobium melioli nitrogen fixation, symbiosis, Medicago sativa 2960.
ionophores, antibiotics antibacterial activity, *Streptomyces coelicolor* 2296.
lanthanide, binding, caldolsin, *Thermus aquaticus* 7760.
levicid, *Arachis hypogaea*, effects on pathogenesis, phytopathogenic fungi pod rot 1121.
nutrient requirements, *Aspergillus aflatoxins* biosynthesis 7068.
release, *Bacillus*, antibacterial activity, sodium citrate 7376.
release, spores, sodium citrate antibacterial activity, *Bacillus* 7375.
transport, mitochondria, inhibition, *Helminthosporium maydis*, T toxin, *Zea mays* 7155.
treatment, apies, effects on, *Penicillium expansum*, post-harvest decay 3850.
- Calcium antagonists**,
N⁶-(2-hydroxyethyl) adenosine, purification, *Corycopsis*, *Isaria* 6060.
- Calcium carbonate**,
fertilizer applications, effects on soil nitrifying bacteria nitrous oxide production 7263.
- Calcium chloride**,
prevention, cellulase, spoilage, fungi, pickles, fermented food 8699.
- Calcium hydroxide**,
+methylamine, use, decontamination methodology, aflatoxins food contamination peanuts meals 7097.
- Calcium oxide**,
effects on nodulation, nitrogen fixation, inoculation, Rhizobium, vesicular-arbuscular mycorrhizas, nodulation 5628.
pelletting, Trifolium repens, Medicago sativa, Rhizobium nodules survival association 2950.
reduction, local coliforms, sewage sludge, land disposal 2375.
soil amendment, effects on Rhizobium nodulation, *Cicer arietinum*, *Lens esculenta* 9015.
soil amendment effects on soil microorganisms population levels, mining wastes 3971.
soil amendment, soil microorganisms, biomass, C/N ratios 2998.
soil amendment, soil pH, effects on roots colonization, vesicular-arbuscular mycorrhizas, *Zea mays* 5629.
- Calcium peroxide**,
disease control, *Fusarium culmorum* infection, *Lolium perenne* 1203.
- Calcium sulfate**,
soil amendment, effects on Rhizobium nodulation, *Cicer arietinum*, *Lens esculenta* 9015.
sulfate conversion sulfur, mixed culture, *Chlorobium limicola* 139.
topsoil/sulfatophium + Desulfobacter 5693.
- Calci virus**,
identification, structural proteins characterization 1735.
- Caldariella acidophila**,
immobilized cells, enzymes, thermal stability, ultrafiltration membranes 764.
- Caldariomyces fumigo**,
chloride peroxidase, association, *Aspergillus niger*, glucose oxidase, xanthine oxidase, use, bioelectrochemical cell, chemicals synthesis 6076.
chloride peroxidase, substrates identification, dimethyl sulfoxide 904.
- Caldolsin**,
calcium, lanthanide binding, *Thermus aquaticus* 7760.
- Calendula officinalis**,
cosmetics, viruses infection 4547.
- Callinectes sapidus**,
isolation, rotavirus, enterovirus, concentration, methodology 2431.
- Callose**,
growth, *Phytophthora infestans* haustoria, disease resistance, tubers, *Solanum tuberosum* 2008.
- Calluna vulgaris**,
roots, meristems development, inhibition, mycorrhizas, *Pozizella ericae* 5560.
- Callus**,
Nicotiana tabacum, *Peronospora tabacina*, infection, colonization 4550.
- Callus culture**,
Coniferaceae, disease resistance, *Phaeoascus schweinitzii* infection 2826.
Medicago sativa, susceptibility, *Phytophthora megasperma* 4507.
plant breeding, inheritance disease resistance, *Pseudomonas syringae* tabaci wildfire, *Alternaria alternata* brown spot, *Nicotiana tabacum* 317.
- Sesbania rostrata* nodules, Rhizobium infection, pathogenesis 3798.
- Calmodulin**,
activation, adenylate cyclase activity, *Neurospora crassa* 7753.
amino acid sequence, structure-activity relationships, *Dicystotellum discoideum* comparison cattle 5992.
multiple forms, purification, characterization, U.V. spectroscopy, *Agaricus campestris*, *Coprinus lagopus*, *Saccharomyces cerevisiae* 8513.
stimulation 3'-5'-cyclic-nucleotide phosphodiesterase activity, *Neurospora crassa* 2583.
- Calocera**,
wood biodegradation 1891.
- Calocera virescens**,
pathogenicity, *Pseudotsuga menziesii* 5597.
- Calomymex**,
mandibular glands, secretions, antimicrobial activity, soil microorganisms 3069.
- Calorimetry**,
methodology, heat production, *Vibrio alginolyticus* 3278.
soil microorganisms biodegradation glucose, soil pollution effects on 2933.
thermodynamics, continuous culture, fermentation, *Saccharomyces cerevisiae*, *Escherichia coli* 6080.
use biosensors, immobilized enzymes 4312.
- Caloscypha fulgens**,
pathogens, *Picea glauca*, *Pinus contorta*, *Pseudotsuga menziesii*, dissemination, *Mammalia* 7237.

- Camellia sinensis**,
red rust, *Cephalosporium virescens* 2019.
- Camembert cheese**,
ripening, aroma compounds, role, surfaces microflora, interaction, *Penicillium camemberti* 6186.
- CAMP test**,
false-positives, role, streptolysin O, *Streptococcus pyogenes* 5906.
identification, *Streptococcus agalactiae* 9311.
- Camphor**,
alicyclic ring, biodegradation, reviews 8277.
- Camphor 5-monoxygenase**,
amino acid sequence, *Pseudomonas putida* 6000.
- Campylobacter**,
antibacterial activity, ciprofloxacin 4744.
antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 6465.
antibiotic RU 28965, antibacterial activity 4878.
clinical isolates, isolation methodology 4216.
disease spread, poultry, surfaces, kitchens 8429.
feces isolation, use, gases generator tablets 3318.
gas chromatography, detection, hippuric acid, fumaric acid, conversion, succinic acid, methodology 794.
isolation, *Larus* feces, media (isolation) 4205.
media (selective), oxidase bacteria growth 1654.
niridazole antibacterial activity 4750.
nontoxic bacteria, media (enrichment), isolation, water 6754.
Vibrio cholerae like toxins, genes probes 5389.
- Campylobacter coli**,
antibiotic sensitivity testing 5755.
antibiotic sensitivity testing, comparison, *Campylobacter jejuni* 9167.
lipopolysaccharides structure 6053.
toxins, characterization 3761.
- Campylobacter fetus**,
media (culture), agar, photooxidation 4210.
media (isolation) 4201.
toxins, characterization 3761.
- Campylobacter fetus subsp. fetus**,
menaquinone-6 methylaldehyde derivatives, detection, new records 980.
- Campylobacter fetus subsp. jejuni**,
antibacterial activity, metronidazole, comparison, niridazole 3124.
enteritis, antibodies detection, enzyme immunoassay methodology, man 782.
enteritis diagnosis, smears methodology 3297.
erythromycin antibiotic resistance 446.
food contamination, poultry 1058.
gastrointestinal tract detection, swabs comparison feces 736.
hydrogenase activity, assays 3327.
isolation, enumeration, media (enrichment), poultry 2462.
isolation, man feces, role, incubation temperature 1648.
isolation methodology comparison, atmospheric conditions, temperature 1650.
lipopolysaccharides, carbohydrate composition, endotoxins, toxicity testing, mice 1945.
media (enrichment), isolation 2517.
media (isolation), methodology 3305.
media (selective) 2473.
media (selective), use, trimethoprim, isolation 1589.
media (transport) comparison, feces, man 3309.
menaquinone-6 methylaldehyde derivatives, detection, new records 980.
recovery, filters analysis, water-borne diseases 563.
serotyping, fluorescent antibody test, comparison, passive hemagglutination 3293.
serotyping methodology 762.
serotyping methodology, agglutination 725.
- Campylobacter jejuni**,
animal isolates, antibiotic sensitivity testing, laboratory animals, dogs 9180.
antibiotic sensitivity testing 5755.
antibiotic sensitivity testing, comparison, *Campylobacter coli* 9167.
clinical isolates, enterotoxins production 7113.
contamination, food 6195.
detection methodology, diarrhea, man 5921.
enterotoxins purification 8749.
growth, media (selective), isolation, frozen food 8704.
hypochlorous acid, chlorine dioxide, antibacterial activity, models, in vitro 3721.
isolation, liquids media (enrichment) 5049.
isolation, media (enrichment), food 6958.
isolation, media (selective), feces isolates 5035.
isolation, milk, sodium bisulfite stimulation survival 4459.
lipopolysaccharides structure 6053.
media (culture), factors affecting survival 6764.
media (enrichment), isolation, feces 7581.
preservation media 5043.
Vibrio cholerae like toxins, production 6210.
- Canada**,
Endogonaceae, *Glomus*, taxonomy, ecological distribution, geographical distribution 8166.
Eutypella parasitica, canker, pathology, economic importance, *Acer saccharum* 8179.
Mammalia, dissemination, *Caloscypha fulgens*, pathogens, *Picea glauca*, *Pinus contorta*, *Pseudotsuga menziesii* 7237.
Pinus banksiana, ectomycorrhizal symbionts 8165.
Populus balsamifera, leafspot, etiology, *Marssonina balsamiferae* sp. nov., taxonomy 3913.
Populus canker, *Erwinia* etiology 2114.
rivers, microbial pollution, fecal coliforms, *Aves* 1502.
softwoods, forest products, protection, biodegradation, fungi 1248.
Trifolium repens, infection, viruses, *Rickettsia*, *Mycoplasma*, pathogenesis 2778.
urban environments, drinking water, viruses analysis 4955.
- Canis**,
fecal coliforms, indicator species, water quality, pollution effects, waste water 4132.
- Cancer patients**,
chemotherapy agents effects on bacteria growth, Bactec test 3319.
- Candida**,
antibiotic sensitivity testing, drug sensitivity testing 8346.
antifungal activity, amphotericin B, 5-fluorocytosine, micronazole 4753.
dealkylation, trifluralin 1041.
digestion (aerobic), industrial effluents, breweries 6701.

Candida, (continued)

drug sensitivity testing 5735.
fatty acid composition, gas chromatography 836.
fermentation, sulfite liquor 6169.
fermented food, retting, *Bacillus*, organoleptic evaluation, cassava 3698.
perm tubes detection, API test 2528.
indicator species, marine pollution, coastal waters 2399.
proteinase secretion 2593.
recovery, blood culture 584.
single-cell protein, feeding trials, nutritive value, chickens 5361.
Trichomonas vaginalis comparison, liquid culture media, isolation 8482.
use, biological control, *Pinus needhami* 2924.
xylose metabolism, lignocelluloses conversion 3651.

fermentation, lignocelluloses, production, ethanol 3617.

Candida albicans,

amphotericin B, antifungal activity 4858.
amphotericin B toxicity 4859.
antibiotic synergism, amphotericin + metacycline 7378.
antibiotics production, morphology association 2255.
antifungal activity, *Agelias* metabolites 9133.
antifungal activity, amphotericin B, antioxidants stabilization 1406.
antifungal activity, cyclosporin A 5312.
antifungal activity, imidazoles 5733.
antifungal activity, iron(II), hydrogen peroxide, iodide 4014.
antifungal activity, m-fluorophenylalanine containing peptides, transport 4758.
antifungal activity, N-(benzylthio)carbamoyl aryl esters 2224.
antifungal activity, p-fluorobenzenesulfonamide derivatives 7294.
antifungal activity, polyoxin L analogs 8311.
antifungal activity, rifamycin 8364.
antifungal activity, rifamycin, amphotericin B 8365.
antifungal activity, 5-fluoro-(2'-nitrofuranyl)-2-benzimidazole 9136.
antigens detection, enzyme-linked immunosorbent assay methodology 2523.
antimicrobial activity, antimicrobial agents, tissue culture, *Peganum harmala* 8336.

antimicrobial activity, atranorin 4781.

antimicrobial activity, urethanes derivatives 1436.
cell walls, ultrastructure, antifungal activity, auleacin A, papulacandin B 9108.

clinical isolates, identification, clinical microbiology 808.

clinical isolates,

1-(4-chlorophenoxyl)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,
1-(4-chlorophenoxyl)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,
antifungal activity 4756.

dimethyl 2-methyl-3-oxosuccinic acid reduction, methyl 2-methylmalates
biosynthesis 3561.

disinfectants antifungal activity, solutions, contact lenses 5870.

drug sensitivity testing, antifungal agents 8308.

drug sensitivity testing, ketoconazole, Bay N 7133, 5-fluorocytosine 5741.

drug sensitivity testing methodology 5736.

dry matter quantification, amphotericin B effects on 3113.

ergosterol biosynthesis, naffine, antifungal activity 5734.

glistagist, catecholamide, iron chelating agents 448.

germ tubes detection, API test 2528.

growth conditions, effects on, polyoxins, antifungal activity 4755.

growth, ketoconazole, miconazole, effects on 4754.

indicator species, pollution control, water reclamation 2394.

methyl-2-methyl-3-(2-furyl)-3-oxopropionate reduction,

methyl-2-methyl-3-(2-furyl)-3-hydroxypropionate production 4399.

miconazole antifungal activity, ergosterol effects on plasma membranes 4757.

morphology, lenticular effects on 5737.

Papularia sphaeroperma papulacandin B, glucans biosynthesis inhibition 1440.

plant extracts, *Citrus* collycinth, *Cochorus depressus*, *Fagonia cretica*,

Lycium barbarum, antimicrobial activity 8339.

Plasma membranes, tripeptidyl polyoxins transport, antifungal activity 458.

proteinase secretion 2593.

Candida boldinii,

dihydroxyacetone kinase, purification, characterization 1781.

formate dehydrogenase, + *Bacillus* sphaericus leucine dehydrogenase, L-leucine

production, membranes reactors 3.

formate dehydrogenase, purification 61.

Candida brasili,

productivity comparison, batch culture, continuous culture 5104.

Candida cylindracea,

Triacylglycerol lipase, hydrolysis, methyl-2-chloropropionic acid,

stereoselectivity, esters production 7769.

Candida deformans, single-cell protein production, use, rapeseed oil, palm oil 872.

Candida glabrata,

proteinase secretion 2593.

Candida guilliermondii,

citric acid production 3416.

dissolved oxygen effects on cell culture 5080.

fungi tannic acid 3675.

growth, hydrocarbons substrates, nitrogen utilization 8289.

hydrolysis, chemical modification, glucans, laminaran, chitin 6942.

proteinase secretion 2593.

Candida humicola,

dimethylphenylarsine, identification methodology 3359.

Candida ingens,

fermentation, animal wastes treatment, proteins production 158.

Candida krusei,

proteinase secretion 2593.

Candida lipolytica,

n-alkanes, metabolism, solubilization, methanol, ethanol, sorbitol oleate 1307.

antifungal activity, essential oils, spices 8318.

citric acid production, carbon sources, whey, *Phoenix dactylifera* seeds 873.

emulsification, n-hexadecane 9039.

fermentation, citric acid production 5962.

single-cell protein, nutritive value, pigs 1917.

single-cell protein production, use, rapeseed oil, palm oil 872.

Candida lusitanae,

antifungal activity, amphotericin B, 5-fluorocytosine, miconazole 4753.

clinical isolates, identification, clinical microbiology 808.

Candida maltosa,

aromatic-L-amino acid aminotransferase, characterization 8582.

Candida maltosa, (continued)

chromate mutase, prephenate dehydratase, prephenate dehydrogenase activity,
tryptophan activation 8580.

Candida norvegensis,

antifungal activity, amphotericin B, 5-fluorocytosine 4753.

Candida paraffinica,

single-cell protein, nutritive value, pigs 1917.

Candida parapsilosis,

clinical isolates,

1-(4-chlorophenoxyl)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,

1-(4-chlorophenoxyl)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,

antifungal activity 4756.

disinfectants antifungal activity, solutions, contact lenses 5870.

proteinase secretion 2593.

U.V. radiation disinfection, kinetics models, water 568.

Candida pseudotropicalis,

β -D-galactosidase, physicochemical properties, role lactose, hydrolysis 2577.

lysis, *Cytophaga*, *Arthrobacter*, *Streptomyces griseus*, single-cell protein

production 6815.

proteinase secretion 2593.

Candida raoultii,

glucose fermentation, isocitric acid production 5961.

Candida rugosa,

single-cell protein production, use, rapeseed oil, palm oil 872.

Candida shehatae,

xylose fermentation, ethanol production 5285.

Candida stellatoidea,

antimicrobial activity, atranorin 4781.

Candida tenuis,

xylose fermentation, ethanol production 5285.

Candida tropicalis,

acyl-CoA oxidase, bioassays, fatty acids serum levels 586.

antibiotic resistance, active transport, nystatin inhibition 5716.

antifungal activity, amphotericin B, 5-fluorocytosine, miconazole 4753.

biomass, single-cell protein, production, yeast hydrolysates, sodium chloride,

humic acids effects on 6809.

clinical isolates, identification, clinical microbiology 808.

enumeration, oranges juices frozen products 7850.

ethanol, fermentation, single-cell protein, temperature effects on 4411.

fungi tannic acid 3675.

lipids, waxes, production 5239.

petroleum fermentation, single-cell protein production 5960.

primaquine conversion 3548.

proteinase secretion 2593.

single-cell protein, nutritive value, pigs 1917.

stimulants, activity, association, *Streptomyces levis* levorin biosynthesis

2318.

xylose conversion, ethanol production 3657.

D-xylose fermentation, hemicelluloses hydrolysates, ethanol production 6935.

Candida utilis,

acetaldehyde production, ethanol conversion 3684.

batch culture, statistical analysis, growth kinetics 800.

biomass measuring techniques 798.

continuous culture, atmospheric pressure, aeration, fermenters 5924.

ethanol conversion, acetaldehyde production 4389.

ethanol conversion, ethyl acetate production 8516.

fermentation, pigments production, extracts, *Beta vulgaris* 6069.

fermentation, potatoes food processing waste water, biomass 157.

fermenters, growth conditions, feedback inhibition, ethanol production 3629.

fermenters, growth conditions regulation 1679.

growth conditions, food processing industrial wastes, kinetics, optimization

9225.

growth conditions, yield 801.

media (culture), sulfite 5935.

+ *Pascomyces varioli*, fermentation, *Saccharum officinale* crop residues 3686.

peat hydrolysates, fermentation, ethanol production 6930.

+ *Phanerochaete chrysosporium*, mixed culture, single-cell protein production,

fermentation, straw, *Triticum aestivum* 1710.

single-cell protein production, fermentation, sulfite liquor 7671.

single-cell protein production, food processing brines, fishery products 6812.

single-cell protein production, growth factors, peat hydrolysates 6808.

stimulation, *Peronospora hyoscyami* cell culture growth 2525.

sulfite liquor fermentation, single-cell protein production, monitoring, computer

applications 5966.

xylose fermentation, anaerobic conditions, effects on ethanol production 991.

Candida valida,

continuous culture, ethanol, temperature, effects on, growth, association,

single-cell protein production 214.

Candida wickerhamii,

cellulose, glucose, fermentation, ethanol 985.

Candidiasis,

experimental infection, antifungal activity, rifamycin, mice 8364.

experimental infection, guinea-pigs, antifungal activity, rifamycin, amphotericin

B 8365.

mannose levels, gas-liquid chromatography, man, rats 2536.

Candidoin,

structure, *Streptomyces viridiflavus* 2303.

Canine distemper virus,

detection, counter immunoelectrophoresis, dogs 598.

Canker,

Botryodiplodia theobromae, pathology, *Pyrus pyrifolia* 8807.

Botryosphaeria dothidea, disease control, benomyl, pruning, *Malus pumila*, USA,

Georgia 3900.

Botryosphaeria dothidea, *Malus pumila*, disease resistance 1200.

Corynebacterium michiganense subsp. *michiganense*, disease reservoirs, soil-born

diseases, crop residues, *Lycopodium esculentum* 8872.

Corynebacterium rathayi infection, toxins production, pasture, *Lolium perenne*

6215.

Endothia parastica, pathogenesis, *Castanea dentata*, *Castanea mollissima* 3914.

Eucalyptus marginata, etiology, pathology 370.

Eutypella parastica, association, defects, forest products, *Acer saccharum* 8180.

Eutypella parastica, pathology, economic importance, *Acer saccharum*, Canada

8179.

Gleditsia tucanensis var. *inermis*, *Nectria cinnabarina*, susceptibility, benomyl,

disease control 3915.

Juglans cinerea, airborne microorganisms, survival, *Sirococcus*

anker, (continued)

clavignenti-juglandaceum conidia 1138.
phytopathogenic fungi, Rubus, USA, Ohio 8846.
Pinus sylvestris, association nutrient dynamics 5601.
Populus, Erwinia etiology, Canada 2114.
Prunus, Pseudomonas syringae pv. syringae, South Africa 274.
Pseudomonas, Actinidia chinensis, pathogenesis, USA, California 275.
Pseudomonas morsprunorum, Prunus avium 5438.
Pseudomonas syringae pv. morsprunorum, disease control, copper sulfate, fatty acids
copper salts, Prunus cerasus 344.
Pseudomonas syringae pv. syringae, virulence, Prunus persica, Malus, Pyrus 8810.
Seridium cardinale, disease resistance, plant breeding, Cyprinus semperivirens
2870.
Sirococcus clavignenti-juglandaceum, Juglans cinerea, pathogenicity, disease
spread, plantations 7991.
Valis ma mul, disease control, antibiotics + copper sulfate, Malus 8139.

and food

Bacillus thermophilus, spore germination, heat resistance, sodium citrate
antibacterial activity 7376.
bacon, fumaric acid esters, inhibition Clostridium botulinum, toxins formation
7034.

bacon, Staphylococcus aureus growth, enterotoxin A formation, water activity,
temperature, oxygen 6979.
beans, spoilage, gas production, Bacillus thermophilus 6988.
corned beef, Staphylococcus aureus contamination, growth 6180.
flame sterilization, temperature monitoring 7022.
spoilage, gases composition, measuring techniques 6178.
vegetables, toxins, Clostridium botulinum 3719.

aning

sterilizers, steam, heat transfer 7036.

tomatoes, sterilization, Bacillus licheniformis spores 7033.

anopoles

Phaseolus vulgaris, effects on disease control, white mold, Sclerotinia

sclerotiorum 7930.

apocryphaga gingivalis

antibacterial activity, sodium fluoride 5861.

apocryphaga ochracea

acid phosphatase, alkaline phosphatase purification, kinetics 2568.

antibacterial activity, sodium fluoride 5861.

apocryphaga apuligens

antibacterial activity, sodium fluoride 5861.

apreomycin

derivatives, di-*p*-lysylcapreomycin, antibacterial activity 3160.

asella bursa-pastoris

beet curly top virus purification methodology, monomers, dimers, isolation,
characterization 3241.

beet western yellows virus isolates, RNA characterization 8668.

host range, Siropilasma citri 4557.

hosts, tobacco ringspot virus, tomato ringspot virus 3818.

tomato yellow top virus, disease transmission, Myzus persicae 7180.

asplum

plant breeding, disease resistance, plant viruses 3856.

tobamovirus infection, identification 8828.

asplum annuum

Athermaria solani leaf blight, Streptomyces griseus interaction 2007.

cultivars, disease resistance, tobacco etch virus, potato virus Y 8070.

cultivars, plant breeding, disease resistance, tobacco etch virus 8902.

cultivars, plant breeding, disease resistance, tobacco etch virus, potato virus
Y, pepper mottle virus 8909.

disease resistance, Phytophthora capsici, blight, crown rot 5508.

leaves, peroxidase activity, Phytophthora capsici disease resistance 2844.

light intensity, effects on infection, Glomus macrocarpum 8975.

pepper mild mottle virus infection, pepper mild mottle virus disease resistance, new
records 4566.

plant breeding, disease resistance, spot, Xanthomonas campestris 8903.

plant breeding, wilt, disease resistance, Pseudomonas solanacearum, root rot,
Phytophthora capsici 8094.

spot, Xanthomonas campestris pv. vesicatoria, chlorosis, ethylene production 4546.

tobacco mosaic virus infection, characterization 2018.

asplum chacoense

spot, Xanthomonas campestris pv. vesicatoria, disease resistance 4582.

asplum frutescens

plant breeding, disease resistance, wilt, Pseudomonas solanacearum, root rot,
Phytophthora capsici 8094.

aspid protein

antigenic determinants, vaccines production, poliovirus 8614.

expression, poliovirus 1 vaccines production, cloning vectors, Escherichia coli
5635.

foot-and-mouth disease virus, isolation, chromatofocusing, methodology 656.

asplules

antibiotic sensitivity testing, clinical isolates, Haemophilus influenzae 4812.

Bacteroides fragilis, lipopolysaccharides, polysaccharides, fatty acid
composition 6867.

gels, polysaccharides, Rhizobium leguminosarum, Rhizobium leguminosarum
var. trifolii 5199.

Haemophilus influenzae type b, polysaccharides detection, methodology comparison
3303.

Klebsiella aerogenes, polymers binding heavy metals, activated sludge 6679.

polysaccharides, bacteria, use vaccines immunogenicity, reviews, man 3184.

polysaccharides, binding, lectins, Rhizobium leguminosarum var. trifolii 6368.

polysaccharides, Bradyrhizobium japonicum, attachment mechanisms, plants roots
7275.

polysaccharides, carbohydrate composition, antigens, Klebsiella pneumoniae 4361.

polysaccharides, purification, characterization, Staphylococcus aureus 6868.

polysaccharides, Rhizobium japonicum, role root hairs infection, nodulation,
Glycine max 2970.

polysaccharides, structure, Streptococcus pneumoniae 6052.

Pseudomonas aeruginosa, antigens, use complement fixation assays 2467.

Streptococcus pneumoniae, polysaccharides, enzyme-linked immunosorbent assay,
immunoglobulin G, immunoglobulin M 1662.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Streptococcus pneumoniae polysaccharides, vaccines, antibody response,
enzyme-linked immunosorbent assay, children 682.

Captafol, (continued)

efficacy, phytopathogenic fungi incidence, Phaseolus vulgaris 2086.

+immersion, disease control, post-harvest decay, blueberries 3851.

role, Colletotrichum gloeosporioides polygalacturonase inhibition 1224.

Captan

antifungal activity, Macrophoma mangifera 4587.

detoxification, glutathione biosynthesis, resistance, Botrytis cinerea 8297.

disease control, Botrytisphaeria dothidea, Botrytisphaeria ribis, wound infection,
pruning, Prunus persica 8913.

disease control, fungi, seed treatments, Zea mays 2093.

disease control, Phytophthora cactorum fruit rot, Botrytis cinerea grey mold,
Frageria chiloensis 7214.

disease control, Pythium aphanidermatum damping-off, Lycopersicon esculentum
1228.

efficacy, phytopathogenic fungi incidence, Phaseolus vulgaris 2086.

+metalaxyl, seed treatments, disease control, damping-off, downy mildew, Brassica
8141.

seed treatments, seed-borne diseases, Vigna aconitifolia 8143.

use, disease control, scab, Malus pumila, residues 8925.

Zea mays, effects on ethanol production, yeasts 3645.

Caragana arborecens

Phellinus punctatus incidence, USA, North Dakota 3838.

Carbadox

antibacterial activity, Clostridium, agar dilution test, animal isolates 3050.

antibiotic sensitivity testing, Escherichia coli, animal isolates, pigs 6500.

Carbapenems

antibacterial activity, Staphylococcus aureus, Escherichia coli,
structure-activity relationships 7461.

biosynthesis pathway, mutants, Streptomyces griseus subsp. cryophilus 4837.

derivatives, antibacterial activity, structure-activity relationships 4820.

derivatives, inactivation, Escherichia coli, Proteus vulgaris, Citrobacter
freundii, β -lactamase 4862.

precursors, production, dimethyl 3-benzoyloxycarbonylamino glutaric acid
hydrolysis, stereoselectivity, enzymes, bacteria 2308.

Streptomyces fulvoviridis, biosynthesis, taxonomy relationship 2302.

Streptomyces, structure 2300.

Carbaryl

+iprodione, +Verticillium lecanii, integrated control, spore germination,
inhibition, Aphididae 2654.

Carbazoles

association, oil, biodegradation, bacteria 4684.

derivatives, antimicrobial activity 1355.

Carbendazim

disease control, Fusarium culmorum infection, Lolium perenne 1203.

drug tolerance, Mycosphaerella fijiensis 7325.

efficacy, phytopathogenic fungi incidence, Phaseolus vulgaris 2086.

resistance, Triticum aestivum-eye spot, association treatment 8129.

seed treatments, seed-borne diseases, Vigna aconitifolia 8143.

treatment, effects on, fungi, spore germination, Saccharum officinale 8127.

disease control, post-harvest decay, oranges, stem rot, green mold 5470.

resistance, Pseudocercospora harpotrichoides 5721.

Carbenicillin

antibacterial activity, apicalin comparison 6527.

antibiotic resistance, Serratia marcescens 447.

antibiotic sensitivity testing, clavulanic acid effects on, Bacteroides fragilis
9164.

antibiotic sensitivity testing, Pseudomonas aeruginosa 3079.

Citrobacter freundii resistance, incidence 6844.

Clostridium perfringens drug sensitivity testing 3085.

hydrolysis, β -lactamase, Pseudomonas aeruginosa, Proteus mirabilis 2619.

β -lactamase activity, Pseudomonas aeruginosa clinical isolates 7345.

β -lactamase hydrolysis, pH role, Bacillus cereus 4277.

+rifampicin, +gentamicin, +cotrimoxazole, antibiotic synergism, antibacterial
activity, Pseudomonas maltophilia 5091.

Carbetamide

effects on Frankia, actinorrhizas, plants infectivity 2123.

herbicides, nitrification, soil 9026.

Carbolfuran

biodegradation, bacteria, pesticide pollution, soil pollution 2173.

biodegradation, soil microorganisms, soil, factors affecting 6387.

chemical control, Nephrotettix virescens, vectors, rice tungro virus, disease
control, Oryza sativa 2072.

formulations, Cicadellidae, Nephrotettix virescens, vectors, rice tungro virus,
Oryza sativa 6295.

seed treatments, +Rhizobium inoculation, nodulation, Glycine max 2990.

translocation, Gibberella zeae, root rot, Puccinia sorghi leaf rust effects on,
Zea mays 259.

Carbohydrate composition

Agrobacterium radiobacter, polysaccharides, biological control, Pythium ultimum,
damping-off, Beta vulgaris 2891.

Campylobacter subsp. jejuni, lipopolysaccharides, endotoxins, toxicity
testing, mice 1945.

extracellular polymers, antitumor activity, Coriulus 3471.

extracellular polysaccharides, oligosaccharides, role roots infection,
Leguminosae 2633.

β -D-glucose, antitumor antibiotics, structure, Grifola frondosa 5208.

hemicelluloses, bagasse hydrolysis, use, carbon sources, fermentation 8677.

lipopolysaccharides, structure, antigens, Shigella boydii 4362.

D-manno-D-glucan, Microcelllosporina grisea, structure-activity relationships,
antitumor activity, solid tumors, mice 4376.

phenylalanyl-tRNA synthetase, comparison cytoplasm, mitochondria, Saccharomyces
cerevisiae 930.

polysaccharides, capsules, antigens, Klebsiella pneumoniae 4361.

polysaccharides, extracellular polymers, gels, Pseudomonas elodea 4369.

polysaccharides, gums, extracellular polymers, Pseudomonas elodea 4366.

structure, oligosaccharides, glycolipids, Mycobacterium leprae 9244.

Carbohydrates

Agrobacterium tumefaciens cell surface, role, crown gall tumors induction, plants
8768.

biodegradation, humus formation, microorganisms, pathway 8965.

catabolism, glucose effects on, aflatoxins biosynthesis, Aspergillus parasiticus
8723.

conversion, ethanol production, reviews, Microorganisms 5272.

degradation enzymes, brown rot, Poria placenta 6820.

fermentation, detection, methodology comparison, Haemophilus 3281.

Subject Index

Carbohydrates, (continued)

fermentation, solvents production, pulp mills, wood, *Clostridium* 5259.
Glycine max, contents, nitrogen fixation relationship 2992.
hydrolysis, α -amylase, exo-1,4- α -D-glucosidase, production optimization, fungi 5193.
hydrolysis, fermentation criteria 3666.
monoclonal antibodies analysis, *Streptococcus* group B identification, latex agglutination, immunoprecipitation 1629.
nutrient sources, *Aspergillus* aflatoxins biosynthesis, mycelia growth 7074.
production, crop residues fermentation, pretreatment 5307.
soil inoculum, peat, effects on *Rhizobium* 4642.
substrates, *Cellulomonas* growth, enzymatic activity production 32.
synthetic, cell culture, yeasts 5528.
transformation, immobilized cells 2724.
utilization, ethanol production, *Thermoanaerobacter* ethanolicus 5283.
Carbomycin A,
deepoxidation, products antibacterial activity 5789.
Streptomyces halstedii subsp. deltae conversion, deltamycin A production, structure 5786.
Carbon,
bonds, chalcane, *Corynebacterium* equi hydrogenation 6153.
compounds, oxidation, biodegradation, reviews 7823.
incorporation, erythromycin biosynthesis, *Streptomyces erythreus* 7452.
interaction, soil microorganisms, straw biodegradation, agricultural ecosystems 2639.
mineralization, association, organic matter, forests soil 8145.
mineralization, humus, soil pH 5656.
nutrient cycles, mineralization, soil microorganisms biomass, paddy fields 5632.
utilization, release, rhizosphere microorganisms, *Triticum aestivum*, *Hordeum vulgare* 2930.
Vitis vinifera content, relationship, fermentation wine, *Saccharomyces ellipsoideus* 7793.
Carbon (activated),
activated sludge, wastewater treatment, dyes, industrial effluents 6677.
adsorption + biodegradation, water treatment 7498.
adsorption, aromatic compounds, biodegradation, wastewater treatment 1475.
adsorption, biodegradation, aromatic compounds removal, water treatment 7502.
adsorption, biodegradation, trihalomethanes removal, water treatment 7501.
adsorption, + biodegradation, water treatment, ground water 7499.
adsorption, interaction biodegradation, water treatment 7646.
adsorption, phenol biodegradation, water treatment, *Arthrobacter* 7500.
filtrate, wastewater treatment, microorganisms, organic matter decomposition 2349.
granules, bacteria colonization, drinking water treatment 553.
+ ozone, biodegradation, removal, trihalomethanes, water treatment 7497.
sewage sludges waste treatment, assays, biomass suspended matter 2379.
waste treatment, aeration, filters, microorganisms 6696.
waste treatment, adsorption, regeneration, bacteria 7496.
Carbon cycle,
mathematical models, soil microorganisms 3938.
microorganisms, reviews 6205.
soil microorganisms biomass, estimation, chloroform fumigation 8224.
soil microorganisms, mathematical models 5636.
soil microorganisms, soil nutrients, forests 6321.
Carbon dioxide,
antifungal activity, *Puccinia* noyae infection, *Tussilago farfara*, pathogenesis 8130.
comparison, ammonium bicarbonate, use, Transgrow media, *Neisseria gonorrhoeae* infection 3288.
exchange, *Hordeum vulgare*, powdery mildew incompatibility 1130.
extracellular levels, effects on fermentation, *Zymomonas mobilis* 149.
high pressure + steam, pretreatment, lignocelluloses, cellulase hydrolysis, crop residues 1748.
metabolism, fuels production, anaerobic bacteria 5312.
nitrogenase activity, ribulosebiphosphate carboxylase mediation, *Bradyrhizobium japonicum* 7289.
oxidation, bioreactors, chlorobium thiosulfatophilum, computer applications, monitoring 3612.
oxygen, reaction mechanisms, cytochrome c oxidase, kinetics, thermophilic bacteria 7755.
pressure, effects on *Streptomyces tetracycline* biosynthesis, fermenters 2281.
production, biodegradation assays, reviews 7822.
production, monitoring, fermentation, computer applications, *Saccharomyces cerevisiae* 6140.
production, relationship, biodegradation, phthalic acid esters, microorganisms 3660.
production, soil microorganisms, ash pollution effects 3951.
production, soil microorganisms, fertilization effects on 2179.
production, soil microorganisms, volcanic ash effects on 7269.
resistance, bacteria, relationship, food 1923.
sensitivity, *Peronospora hyoscyami* f.sp. tabacina 5522.
sensors, monitoring, fermentation 6114.
soil aeration, effects on *Glomus macrocarpum* symbiosis, *Eupatorium odoratum*, *Guztonia abyssinica*, *Sorghum bicolor* 3637.
uptake, methanogenic bacteria, measuring techniques 3263.
utilization, methanol production, fermenters 3558.
utilization, *Rhizobium lupini*, association, nitrogen fixation 9022.
Carbon fixation,
enzymes, activity, *Erysiphe graminis* f.sp. hordei, powdery mildew, inhibition *Hordeum vulgare* 3434.
Carbon monoxide,
carbon sources, methanogenesis, hydrogen metabolism, *Methanosarcina barkeri* 3962.
conversion, organic acids production, *Butyrivibrio methylotrophicum* 3418.
inhibition, hydrogenase activity, *Azospirillum brasilense* 5585.
inhibition, hydrogenase activity, butanol fermentation, *Clostridium acetobutylicum* 8646.
inhibition, nitrogenase, association, ethylene, production, soil microorganisms, soil 6357.
iron chelating agents, inhibition *Clostridium botulinum* toxins, pork, minced meat 7035.
metabolism, fuels production, anaerobic bacteria 5312.
storage conditions, prevention, post-harvest decay, grapes 8057.
Carbon monoxide dehydrogenase,
characterization, *Rhodospirillum rubrum* 5660.
Methanosarcina barkeri, purification, characterization 3521.
Carbon sources,
Agaricus bisporis mycelia growth, *Bacillus subtilis* cell walls biodegradation

Carbon sources, (continued)

6151.
amino acids, tyalcane biosynthesis, *Streptomyces fradiae* 3162.
aromatic compounds, soil, role inoculum survival, *Rhizobium leguminosarum var. trifolii* 3961.
Aspergillus oryzae, exo-1,4- α -D-glucosidase biosynthesis 4332.
bioassays, bacteria, acetylene reduction, effects on 7614.
carbon monoxide, methanogenesis, hydrogen metabolism, *Methanosarcina barkeri* 3962.
cellulose, cellulase, effects on excretion, cellulolytic enzymes, *Schizophyllum commune* 6874.
2-chlorobenzoic acid utilization, *Pseudomonas cepacia* 6954.
degradation, soil microorganisms, kinetics, models 2127.
effects on, growth, morphology, ethanol, production, *Zymomonas mobilis* 3615.
effects on pectinolytic enzymes production, continuous culture, *Aspergillus niger* 8601.
effects on polysaccharides biosynthesis, extracellular polymers, *Cryptococcus laurentii* 5198.
energy metabolism, activated sludge, statistical analysis 7522.
fermentation, sulfite liquor, single-cell protein production, *Pichia labacensis* sp. nov. 6816.
fermentation, use bagasse hydrolysates, carbohydrate composition, amino acid composition, sugars 8677.
Fusarium oxysporum fermentation 1860.
humification, decomposition, biomass levels, soil microorganisms, clays 2938.
hydrocarbons, *Aspergillus flavus*, proteinase, α -amylase, activity, association 2189.
hydrocarbons, fermentation, single-cell protein production, reviews 8288.
hydrocarbons, nutrient requirements, L-lysine production, *Arthrobacter globiformis* 4265.
lignocelluloses, agricultural wastes, endo-1,3- β -D-glucanase production, *Streptomyces* 3470.
lipids, production, *Spacelotheca reiliana*, *Tolyposporium ehrenbergii* 1850.
L-lysine production, *Corynebacterium glutamicum* 886.
milk (culture), effects on autolysis, dairy starters, *Streptococcus* group N 7733.
metabolism, tin antifungal activity, *Cunninghamella echinulata*, *Fusarium oxysporum* 1341.
methanol, *Hyphomicrobium* growth, waste water denitrification 1492.
methanol, single-cell protein production, microorganisms 1922.
mixed culture, *Bacillus circuliatus* + *Phaffia rhodozyma*, lytic enzymes activity relationship astatinatin extraction 1743.
molasses, ethanol fermentation, biomass production, *Saccharomyces cerevisiae* 3607.
nutrient availability, proteinase production, *Pseudomonas fluorescens* 7749.
nutrient flow, vesicular-arbuscular mycorrhizas mycelia, roots, *Acer pseudoplatanus* 5555.
nutrient requirements, *Bacillus*, endospores formation, soil 4619.
nutrient requirements, lipids production, *Rhodotropa glutinis* 1856.
polysaccharides biosynthesis, effects on, *Cryptococcus laurentii* 6054.
regulation, *Streptomyces clavuligerus* biosynthesis cepham, aeration 3097.
regulation, *Streptomyces clavuligerus*, cepham, production 6522.
soil microorganisms biodegradation, heat production association 2150.
soil microorganisms decomposition, biomass levels, factors affecting, soil analysis, clays 2935.
sugar, effects on growth rate, anhydrotetracycline oxygenase, aureomycin production, *Streptomyces aureofaciens* 4860.
translocation, ectomycorrhizas effects on, *Pinus taeda* 5572.
triacylglycerol lipase production, *Fusarium solani* 1805.
triacylglycerol lipase production, *Pseudomonas fluorescens* 1806.
Trichoderma reesei enzymes production, milk (culture) 1803.
whey, Phoenix dactylifera seeds, *Candida lipolytica* 873.
Carbon-14,
enrichment, organic matter, biodegradation, flux, turnover, soil microorganisms, 1964.
radioactive labeling, liquids scintillation, *Aspergillus nidulans* 5933.
Carboxin,
analogs, structure-activity relationships, antifungal activity 4015.
efficacy, phytopathogenic fungi incidence, *Phaseolus vulgaris* 2086.
Rhizoctonia sensitivity 8106.
3-(2-Carboxyhydrazine)-phenylimino-2-oxinobutane,
copper, nickel, chelation, antibacterial activity, *Mycobacterium* 4005
Carboxylase,
purification, characterization, electrophoresis, *Pseudomonas fluorescens* 6869.
Carboxylesterase,
purification, characterization, *Escherichia coli* 8557.
Carboxylic acid,
alicyclic ring, biodegradation, reviews 8277.
derivatives, antibacterial activity 4748.
derivatives, antibacterial activity, *Mycobacterium* 3046.
S-(Carboxymethyl)-D-cysteine,
biosynthesis, association cephalosporins, *Pseudomonas putida* 4822.
Carboxymethylcellulase,
activity, cellulase samples, *Aspergillus niger*, *Trichoderma viride* 8533.
Carboxymethylcellulose,
hydrolysis, cellulolytic enzymes, *Chaetomium cellulolyticum* 1752.
b-(L-Carboxymethylcysteinyl)-L-cysteinyl-D-valine,
substrates, penicillin analogs enzymatic synthesis, *Streptomyces clavuligerus* 5776.
Carboxypeptidase A,
activity, *Aspergillomarasmin* A, *Aspergillomarasmin* B inhibition, *Aspergillus oryzae* 3734.
Carboxypeptidase Y,
immobilized enzymes, peptide synthesis applications, yeasts 63.
3-(3-Carboxyphenylthio-semicarbazone)-2-indolione,
derivatives, synthesis, antiviral activity 7366.
Carcasses,
disposal, environmental hygiene, pathogens 2360.
poultry, contamination, coliforms, meat industry 1051.
Salmonella, *Staphylococcus aureus*, buffaloes 6199.
turkeys, bacteria contamination, cleaning systems, meat industry 1053.
Carcinoma,
nasopharynx, immunodiagnosis, autoradiography, Epstein-Barr virus, immunoglobulin A antibodies, man 4992.
Carduus nutans,
weed control, susceptibility, *Puccinia carduorum* biological control 6073.

- us pycnocephalus**,
logical control, rust, *Puccinia cardui-pycnocephali* 8025.
- us tenuifolius**
logical control, rust, *Puccinia cardui-pycnocephali* 8025.
- x walteriana**,
necrotic lesions, biodegradation, microorganisms 2704.
- ca papaya**,
n-ethyl isothiocyanate, relationship, disease resistance, *Phytophthora palmivora* 861.
- light**, *Corynespora cassicola*, India 6254.
- aya leaf reduction virus** plant diseases, biochemical characteristics association pathogenesis 8812.
- nt diseases**, papaya mosaic virus, etiology 4524.
- st-harvest decay**, fruit rot, fungi 8876.
- ation mottle virus**,
action, *Dianthus caryophyllus* protoplasts 285.
- eta**,
socomal infection epidemiology, hospitals, man 581.
- mob**,
mobilization, *Brevibacterium flavum*, fumarate hydratase activity 75.
- obilization**, tyrosine phenol-lyase activity, *Citrobacter freundii* 7656.
- obilized cells**, glucose fermentation, ethanol production, *Zymomonas mobilis* 5300.
- icidium utricae** immobilized cells, proteins contents, methodology 5931.
- ports**, immobilized cells, penicillin G biosynthesis, nutrient concentrations, *Penicillium chrysogenum* 4048.
- namus tinctorius**,
maria carthami isolates pathogenicity 1145.
- ase resistance**, root rot, *Phytophthora cryptogea*, screening, environmental actors 7970.
- light**, *Alternaria carthami*, factors affecting 5449.
- rspt**, *Alternaria carthami*, *Alternaria alternata*, pathology 1144.
- nt breeding**, disease resistance, *Phytophthora cryptogea* root rot, *Alternaria carthamea* leaf blight 6296.
- namus tructoria**,
nt breeding, disease resistance screening projects, *Phytophthora cryptogea* 7168.
- ings**,
od, fungi, biodegradation, anthropology 1023.
- illinoensis**,
ase resistance, leaves histopathology, host-pathogen interactions, scab, *Cladosporium caryigenum* 3814.
- rosphaera penicillata** powdery mildew, effects on photosynthesis 5446.
- ns spot**, *Gnomonia nervisepta*, pathogenesis, epidemiology, disease control, fungicides 1137.
- ophylene epoxide**,
antifungal activity, fungus gardens, plant extracts, *Hymenaea courbaril* 2221.
- in**,
acts on antibacterial activity, butylated hydroxyanisole, tertiary butylhydroquinone 6450.
- rolysis**, *Bacillus subtilis* proteinase 921.
- duction**, dairy starters, *Streptococcus cremoris*, *Streptococcus diacetylactis* 7861.
- ulation** proteinase, extracellular enzymés, *Pseudomonas aeruginosa* 1810.
- rospores**, *Aspergillus growth*, aflatoxins biosynthesis, isolation, milk, cattle, buffaloes 7078.
- inolytic enzymes**,
hyveromycetes lactis, pH effects on 22.
- ere**,
mentation, single-cell protein production, *Rhizopus oligosporus* 1714.
- erol**, food, organoleptic evaluation, retting, lactic acid bacteria, *Corynebacterium*, *Bacillus* 3698.
- ns**, fermenters, *Aspergillus fumigatus*, single-cell protein production 1709.
- la acutifolia**,
rosphaera alternata leafspot, new records, India 2040.
- la angustifolia**,
rosphaera alternata leafspot, new records, India 2040.
- la garrettiana**,
od, extracts, 3,3',4,5'-tetrahydroxystilbene, antifungal activity, structure-activity relationships, *Penicillium citrinum*, *Rhizopus nigricans* 7384.
- la pleurocarpa**,
essia yellow blotch virus isolation, characterization, Australia, new records 3800.
- la yellow blotch virus**,
olation, characterization, *Cassia pleurocarpa*, Australia, new records 3800.
- er**,
nt, *Endothia parasitica*, vectors, *Lehmannia marginata* 8954.
- us dentata**,
biological control, use hypovirulence strains, temperature effects on growth rate, *Endothia parasitica* 8184.
- nt**, *Endothia parasitica*, virulence biological control, double-stranded RNA, killer factor 8638.
- nt**, gene mapping, virulence, biological control, *Endothia parasitica* 8183.
- phonectria parasitica** isolates, virulence conversion, blight biological control 6226.
- phonectria parasitica** isolates, virulence conversion, blight biological control 6327.
- othia parasitica** infection, incidence 4526.
- ogenesis**, *Endothia parasitica*, canker 3914.
- anea mollissima**,
hogenesis, *Endothia parasitica*, canker 3914.
- anea sativa**,
nt, biological control, *Endothia parasitica* virulence conversion, double stranded RNA elimination 6328.
- thophora disease** control, root rot, crown rot 3876.
- erina**,
norrhizas, Frankia 4596.
- norrhizas**, histochemistry, Frankia 4604.
- norrhizas**, nitrogen fixation, tropical environment, reviews 2914.
- ules**, Frankia isolation 4597.
- arina cunninghamiana**,
norrhizas inoculation, nodulation, agroforestry, Frankia 8149.
- ules**, actinorrhizas, hemoglobins levels 4605.
- Casuarina equisetifolia**,
actinorrhizas inoculation, nodulation, agroforestry, Frankia 8149.
- Catabolite repression**,
ethanol fermentation, com, *Saccharomyces cerevisiae* 2677.
- mutants** selection, exo-1,4- α -D-glucosidase production, *Aspergillus niger* 5118.
- resistance** mutants, fermentation, whey lactose, continuous culture, *Saccharomyces cerevisiae* 8668.
- resistant** mutant, *Trichoderma reesei*, cellulase, production, screening, media enrichment 1797.
- Thermomonaspora curvata**, resistant mutant, cellulase biosynthesis 1746.
- Catalase**,
activity, relationship, microorganisms, colonization, biodegradation, forest products, cresolite, effects on 1243.
- Aspergillus niger** mycelia, immobilization 1739.
- + α -chymotrypsin**, immobilization methodology 4304.
- detection**, identification, *Neisseria gonorrhoeae* 691.
- detection**, molds 1799.
- isozymes**, purification, characterization, *Micrococcus* 1793.
- liver**, + *Aspergillus niger* glucose oxidase, immobilized enzymes, glucose oxidation, cattle 2578.
- production**, detection spoilage, *Enterobacteriaceae*, luncheon meat 6967.
- purification**, characterization, *Escherichia coli* 8532.
- purification**, characterization, *Proteus mirabilis* 1778.
- roots**, intercalation, sulfur bacteria, ultrastructure, rhizosphere, *Oryza sativa* 8962.
- thermal** stability, *Micrococcus* 8594.
- Catalase test**,
+ peroxidase, *Legionella pneumophila* identification 5039.
- Catalysis**,
chemicals, production, use, immobilized enzymes, microorganisms, reviews 6031.
- immobilized** enzymes, efficacy optimization 8553.
- Catalysis**,
formation, ionotropic gelation, immobilized cells 4373.
- hydrocarbons** oxidation, methylotrophic bacteria 425.
- + immobilized** enzymes, kinetics 5195.
- inactivation** kinetics, immobilized enzymes 5194.
- Catchment areas**,
bacteria, fertilization effects on, forests 2106.
- Catechol dioxygenase**,
metals, binding, substrates 5177.
- Catechol oxidase**,
active sites, copper complex, *Neurospora crassa* comparison *Agaricus bisporus* 5174.
- copper** active sites, role tryptophan, fluorescence, *Neurospora* 5173.
- Catechol 1,2-dioxygenase**,
catechol 2,3-dioxygenase, substituted aromatic compounds, *Nocardia corallina* 912.
- Catechol 2,3-dioxygenase**,
inactivation kinetics, 3-chlorocatechol, 3-fluorocatechol, *Pseudomonas putida* 3449.
- induction**, substituted aromatic compounds, *Nocardia corallina* 912.
- Catecholamide**,
iron chelating agents, bacteriostasis, fungistasis 448.
- Catenaria anguillulae**,
antibiotics production, screening 528.
- biological** control, *Meloidogyne incognita*, sodium azide, effects on 8253.
- parasitism**, spores, *Phytophthora cinnamomi*, *Phytophthora parasitica*, biological control, root rot, *Citrus*, *Persea* 5515.
- Catharanthus roseus**,
extracts, antifungal activity, phytopathogenic fungi 3884.
- leafspot**, *Alternaria alternata* 8049.
- mycoplasma-like** organisms infection, pleomorphism, staining 2816.
- mycoplasma-like** organisms, isolation, enzymes digestion 281.
- wilt**, gram-negative bacteria, pathogenicity, colonial characteristics 280.
- Catheterization**,
clinical isolates, drug resistance, trimethoprim 7347.
- Escherichia coli**, antibacterial activity, iontophoresis 734.
- Cateleers**,
polytef, comparison, polyvinyl chloride, bacteria incidence 3222.
- Cationomycin**,
Actinomadura azurea sp. nov., biosynthesis 1416.
- Cations**,
effect on streptomycin antifungal activity, *Phytophthora infestans* 7379.
- levels**, effects on antibiotic sensitivity testing 6498.
- soil**, relationship *Phymatotrichum omnivorum* ecological distribution 374.
- use**, precipitation, citrus exocortis viroid RNA 3247.
- Cattle**,
animal isolates, *Staphylococcus*, API test identification 3271.
- animal** wastes + cellulose, digestion (anaerobic) 7513.
- animal** wastes, + *Cocos nucifera* agricultural wastes, methane production 1487.
- animal** wastes, digestion (anaerobic) 7505.
- animal** wastes, digestion (anaerobic), methanogenesis 7504.
- animal** wastes, digestion (anaerobic), wastewater treatment, mesophilic bacteria 7519.
- bile**, *Leuconostoc oenos* resistance, effects on viability, freeze-drying, malolactic fermentation, wine 6125.
- Brucella abortus** vaccination, tests comparison, complement fixation, hemolysis 1582.
- calmodulin** amino acid sequence, structure-activity relationships comparison 5992.
- Dactyloctenium discoidium** 5992.
- dairies**, antibiotics administration, bacteria, antibiotic resistance 430.
- endometritis**, clinical isolates, bacteria, treatment, antibiotic sensitivity testing 4813.
- Escherichia coli** isolates, enterotoxins isolation, characterization 8762.
- feces**, detection, rotavirus, coronavirus, electron microscopy comparison enzyme-linked immunosorbent assay 8434.
- feces**, fecal coliforms release, rain, water quality 4941.
- feed** efficiency, avoparcin, feeds additives effects on 7878.
- foot-and-mouth** disease virus synthetic peptides vaccines, antigenicity, production 6659.
- housing**, airborne microorganisms 6722.
- immunogenicity**, *Haemophilus influenzae* antigens isolation, vaccines production 4895.
- interferon** antiviral activity, respiratory tract isolates 4759.
- intoxication**, mycotoxins, food contamination, Zea mays 6205.
- juveniles**, nutrient availability, single-cell protein, *Torulopsis utilis* 1921.

Cattle, (continued)

- keratoconjunctivitis, *Moraxella bovis*, media (isolation) 2452.
 liver catalase + *Aspergillus niger* glucose oxidase, immobilized enzymes, glucose oxidation 2578.
 manure, digestion (anaerobic), waste treatment 9226.
 mastitis, disease control, cow's milk, penicillin, quinaldofur, antibacterial activity, *Staphylococcus*, *Streptococcus* 5773.
 mastitis, disease control, milking machines 571.
 mastitis, prophylaxis, iodine, teat dips 4959.
 mastitis, *Staphylococcus aureus* isolates, enterotoxin production, coagulase analysis 231.
 milk isolates, *Staphylococcus aureus* drug sensitivity testing 6462.
 milk, isolation, casein, substrates, *Aspergillus* growth, aflatoxins biosynthesis 7078.
 milking machines disinfection, mastitis disease control 9260.
 mycoplasmosis immunodiagnosis, counter immunoelectrophoresis methodology, *Mycoplasma* identification 6779.
 nutritive value, single-cell protein, *Saccharomyces cerevisiae*, silage preservatives 2747.
 paratuberculosis diagnosis, enzyme-linked immunosorbent assay methodology, *Mycobacterium paratuberculosis* protoplasm peptides 4185.
 rumen, cellulolytic bacteria, digestibility, feeds, turnips + straw 1920.
 rumen microorganisms, organic acids fermentation 1919.
Salmonella typhimurium, antibiotic resistance, gentamicin 3998.
 salmonellosis prophylaxis, *Salmonella typhimurium* vaccines 5811.
 semen, isolation, *Mycoplasma canadense* 5023.
 semen, isolation, *Ureaplasma*, *Mycoplasma*, antibiotic sensitivity testing 7473.
 serum proteins, binding, turrimycin 7474.
 skin microflora, bacteria, counting methods 4138.
Staphylococcus isolates, antibiotic resistance 3041.
 straw, *Oryza sativa*, digestibility, methanogenesis, digestion (anaerobic) effects on 7875.
 urine, soil, effects on denitrification 2948.
 vagina, secretion, *Brucella abortus* antigens, enzyme-linked immunosorbent assay 6763.
- Cauliflower mosaic virus**, infection, effects on brittle root disease, *Spiroplasma citri*, *Armoracia rusticana* 8020.
- Caulobacter crescentus**, penicillin-binding protein, purification, characterization 2559.
- CDP-diacylglycerol synthase**, enzymatic activity detection, phospholipids biosynthesis, *Saccharomyces cerevisiae*, autoradiography 3364.
- Cecidomyiidae**, infestation, pest control, fruit bodies production, culture, *Basidiomycetes* 7855.
- Cecropin A**, synthesis, solid phase methods 4732.
- Cefaclor**, comparison, antibiotic FK 027, antibacterial activity, bacteria 2316.
- Cefadroxil**, antibacterial activity, *Staphylococcus aureus*, *Streptococcus agalactiae* 9189.
- Cefamandole**, antibacterial activity, *Staphylococcus aureus*, in vivo, in vitro 6523.
 antibiotic resistance, disc-diffusion test, gram-negative bacilli 8292.
 antibiotic resistance, *Klebsiella pneumoniae*, plasmids, conjugation, *Serratia marcescens* 4716.
 antibiotic sensitivity testing, disc-diffusion test, clinical isolates, bacteria 4819.
 antibiotic sensitivity testing, *Haemophilus influenzae*, MS-2 system 498.
 antibiotic sensitivity testing, *Streptococcus* group D, media effects on 3095, hand isolates sensitivity 6524.
 stability, N-methylthiotetrazole side chains 8343.
Streptococcus group B susceptibility 1381.
- Cefatrizine**, antibacterial activity, *Staphylococcus aureus*, *Streptococcus agalactiae* 9189.
- Cefmenoxime**, antibacterial activity comparison, cefotaxime, moxalactam 1388.
 antibacterial activity eye microflora, man 7546.
- Cefmetazole**, antibiotic sensitivity testing, *Leptospira* 1373.
 comparison, β -lactam antibiotics, antibacterial activity, *Staphylococcus aureus*, lipoteichoic acid, release 1393.
- Cefoperazone**, antibacterial activity comparison, cephalosporins, N-formimidoyl thienamycin, *Pseudomonas aeruginosa* 508.
 antibacterial activity, *Staphylococcus aureus*, *Streptococcus agalactiae* 9189.
 antibiotic sensitivity testing, bacteria 502.
 antibiotic sensitivity testing, *Proteus penneri* 9162.
 antibiotic sensitivity testing, *Pseudomonas aeruginosa* 503.
 antibiotic synergism, aztreonam, antibacterial activity, gram-negative bacilli, *Staphylococcus aureus* 6504.
 \pm aztreonam, \pm amikacin, serum bactericidal activity, *Escherichia coli*, *Klebsiella pneumoniae*, *Serratia marcescens*, *Pseudomonas aeruginosa* 8344.
 stability, N-methylthiotetrazole side chains 8343.
Staphylococcus group B susceptibility 1381.
- Cefotaxime**, antibacterial activity 1384.
 antibacterial activity comparison, cefmenoxime 1388.
 antibacterial activity, Enterobacteriaceae 3099.
 antibacterial activity, Enterobacteriaceae 4809.
 antibacterial activity, Enterobacteriaceae, *Haemophilus influenzae*, *Haemophilus parainfluenzae* 5754.
 antibacterial activity, mixed culture, *Escherichia coli*, *Bacteroides* 9182.
 antibacterial activity, penicillin antibiotic resistance, *Staphylococcus aureus*, *Staphylococcus epidermidis* 4826.
 antibacterial activity, *Pseudomonas aeruginosa* 7377.
 antibacterial activity, *Staphylococcus aureus*, *Streptococcus agalactiae* 9189.
 antibiotic resistance, cross-resistance, amikacin, clinical isolates, *Serratia marcescens* 4887.
 antibiotic resistance, *Klebsiella pneumoniae*, plasmids, conjugation, *Serratia marcescens* 4716.
 antibiotic sensitivity testing, *Branhamella catarrhalis* 9163.
 antibiotic sensitivity testing, disc-diffusion test, bacteria 1387.
 antibiotic sensitivity testing, *Leptospira* 1373.
 antibiotic sensitivity testing, *Streptococcus* group D, media effects on 3095.
 antibiotic synergism, aminoglycoside antibiotics, *Streptococcus* 1382.

Cefotaxime, (continued)

- antibiotic synergism, cefotaxime, *Streptococcus* 1382.
 antibiotic synergism, gentamicin, bactericidal activity, *Streptococcus* group G 7423.
 antibiotic synergism, imipenem, amikacin, *Nocardia asteroides* 480.
 cefsulodin, antibiotic synergism, antibacterial activity, *Bacteroides* 6512.
Pseudomonas aeruginosa antibiotic sensitivity testing 1383.
Streptococcus group B susceptibility 1381.
- Cefotetan**, stability, N-methylthiotetrazole side chains 8343.
- Cefotiam**, antibacterial activity, β -lactamase, antibiotic resistance, *Enterobacter*, *Klebsiella* 4711.
- Cefoxitin**, antibacterial activity, β -lactam antibiotics antagonism, reviews 507.
 antibacterial activity reduction, Bactec test media, Thiol broth 6458.
 antibacterial activity, *Staphylococcus aureus*, *Streptococcus agalactiae* 9189.
 antibiotic resistance, *Klebsiella pneumoniae*, plasmids, conjugation, *Serratia marcescens* 4716.
 antibiotic sensitivity testing, anaerobic bacteria, clinical isolates 6549.
 antibiotic sensitivity testing, disc-diffusion test, clinical isolates, bacteria 4819.
 antibiotic sensitivity testing, *Escherichia coli* 7440.
 antibiotic sensitivity testing, *Proteus penneri* 9162.
Bacteroides fragilis antibiotic resistance 1309.
 cefsulodin, antibiotic synergism, antibacterial activity, *Bacteroides* 6512.
 inhibition, β -lactamase, structure-activity relationships, *Enterobacter cloacae*, *Citrobacter freundii* 5120.
 \pm mezlocillin, antibacterial activity, bactericidal activity, antibiotic antagonism, antibiotic synergism 7412.
 stability, β -lactamase 1394.
Streptococcus group B susceptibility 1381.
- Cefpirimide**, antibacterial activity, *Pseudomonas aeruginosa*, inhibition, β -lactamase 4830.
- Cefpiramide**, antibacterial activity, anaerobic bacteria 3101.
 antibacterial activity, Enterobacteriaceae 4821.
- Cefsulodin**, antibiotic resistance, association, β -lactamase, *Pseudomonas aeruginosa* 4696.
 antibiotic synergism, + sulbactam, + cefoxitin, + cefotaxime, antibacterial activity, *Bacteroides* 6512.
- Ceftazidime**, antibacterial activity, agar diffusion test 2259.
 antibacterial activity, bacteria, animal isolates, *Serpentes*, in vitro, in vivo 5786.
 antibacterial activity, Enterobacteriaceae, *Staphylococcus aureus* 9186.
 antibacterial activity, *Pseudomonas aeruginosa* 6507.
 antibacterial activity reduction, Bactec test media, Thiol broth 6458.
 antibacterial activity, *Staphylococcus aureus* 8351.
 antibiotic resistance, association, β -lactamase, *Pseudomonas aeruginosa* 4696.
 antibiotic sensitivity testing, *Proteus penneri* 9162.
 \pm clindamycin, antibacterial activity 6515.
 high-pressure liquid chromatography, serum, urine 500.
 \pm netilmicin, antibacterial activity, gram-negative bacteria 7428.
- Ceftizoxime**, antibacterial activity 4827.
 antibiotic sensitivity testing, *Leptospira* 1373.
 antibiotic sensitivity testing, *Proteus penneri* 9162.
 \pm gentamicin, antibacterial activity, *Pseudomonas aeruginosa*, clinical isolates 6516.
 \pm mezlocillin, antibacterial activity, bactericidal activity, antibiotic antagonism, antibiotic synergism 7412.
 + water, antibacterial activity, disc-diffusion test 4046.
- Ceftriaxone**, antibacterial activity, agar diffusion test, Enterobacteriaceae 1392.
 antibacterial activity, clinical isolates, bacteria 6509.
- Cefuroxime**, antibacterial activity, penicillin antibiotic resistance, *Staphylococcus aureus*, *Staphylococcus epidermidis* 4826.
 antibiotic resistance, *Klebsiella pneumoniae*, plasmids, conjugation, *Serratia marcescens* 4716.
 antibiotic sensitivity testing, *Branhamella catarrhalis* 9087.
 antibiotic sensitivity testing, *Branhamella catarrhalis* 9163.
 antibiotic sensitivity testing, disc-diffusion test, clinical isolates, bacteria 4819.
- Celary mosaic virus**, purification methodology 6740.
- Cell adhesion**, *Actinobacter calcoaceticus*, polystyrene, olive oil effects on 776.
 bacteria, bioassays, comparison 7615.
 bacteria, comparison, penetration, cell culture monolayers, detection methods 5988.
Colletotrichum lindemuthianum, spores, *Phaseolus vulgaris*, hypocotyls 3796.
Pseudomonas solanacearum, *Nicotiana tabacum* cells, leaves cell walls 6282.
Staphylococcus epidermidis, surfaces hydrophobicity, polymers, medical dress 6428.
- Cell aggregation**, filtration, use biomass harvesting, *Lactobacillus acidophilus* 6802.
- Cell culture**, continuous culture, biomass production, use vaccines, *Bordetella pertussis* 922.
 cryopreservation, yeasts 4222.
 epidemic hemorrhagic fever virus propagation, rats, *Apodemus agrarius* 7564.
 fungi, filtrates, tributyltin biodegradation 3648.
 herpes simplex virus, detection, methodology 8436.
 γ -interferon, antiviral activity, retrovirus 7390.
 Vero cells, quail embryos, propagation, Sephadex carriers, mumps virus 7562.
- Cell disruption**, bacteria, methodology, proteins extraction 1593.
- Cell division**, *Escherichia coli* conditional mutant, mecillinam effects on 3102.
- Cell fusion**, genetic engineering, biotechnology, industries, books 3367.

- Cell membranes,**
antibacterial agents effects on, bacteria 9094.
cytochrome b, reaction centers, purification, characterization, *Chlorobium limicola* f.sp. *thiosulfatophilum* 4253.
deltonin effects on, *Micrococcus lysodeikticus* 7355.
dioxidine effects on, *Staphylococcus aureus*, *Micrococcus lysodeikticus* 8306.
extracellular particles, role, *Acinetobacter calcoaceticus*, nutrient uptake, hydrocarbons 7308.
multienzyme complexes, electron transport chain, cytochrome c551, cytochrome c552.5, purification, characterization, *Thiobacillus versutus* 7703.
Pseudomonas, polyvinyl alcohol oxidation enzymes, purification, characterization 1742.
role, *Escherichia coli*, *Pseudomonas aeruginosa*, wild type, envelopes mutants, serotype association, antibiotics, preservatives 3080.
serine proteinase, purification, characterization, *Bacillus subtilis* 1783.
Cell permeability,
continuous culture, malate dehydrogenase activity, alcohol dehydrogenase activity, *Saccharomyces cerevisiae* 3592.
Cell proliferation,
Agrobacterium, crown gall, host-parasite interactions, host plants 8855.
Cell surface,
Agrobacterium tumefaciens interaction plant cells, crown gall 8854.
hydrophobicity, *Escherichia coli* injuries, antibiotics sensitivity 2241.
localization, endoexoyribonuclease, *Streptococcus sanguis* 4320.
organelles, cellulose binding, cellulolytic enzymes, *Clostridium thermocellum* 5112.
Rhizobium mellotti, strains, nodulation, *Medicago sativa*, agglutinins 5651.
Vibrio cholerae, antigens, enzyme-linked immunosorbent assay methodology 1624.
Cell walls,
Bacillus subtilis, biodegradation, carbon sources, *Agaricus bisporis* mycelia growth 6151.
bacterial acyl type identification, use, glycolic acid assays, methodology 9299.
biosynthesis inhibition, antibiotics antibacterial activity 9174.
biosynthesis, tunicamycin, inhibition, effects on, *Streptomyces griseus*, streptomycin, production 2273.
degradation enzymes, *Penicillium steckii*, cocoa beans biodegradation association 2823.
diastase pectin, degradation, rumen microorganisms 4428.
hydrolysis, role, *Ruminococcus albus*, α -L-arabinofuranosidase, purification, physicochemical properties 5121.
hydroxyproline levels, *Cucumis sativus*, disease resistance, *Cladosporium cucumerinum* 7205.
leaves, *Nicotiana tabacum*, *Pseudomonas solanacearum* cell adhesion 6282.
lignocellulose, steam disruption, cellulose, hydrolysis 5278.
lysozyme, purification, characterization, *Sporobolomyces ruberrimus* 2585.
Medicago sativa, hydroxyproline content, association, wilt, *Verticillium albu-atrum*, *Corynebacterium michiganense* p.v. *insidiosum* 7928.
Medicago sativa, subtilization, enzymes, *Ruminococcus albus* 5117.
membrane proteins, purification, characterization, *Legionella* 2561.
peptidoglycane, *Clostridium saccharoperbutylacetonicum*, *Bacillus subtilis*, lytic enzymes, enzymatic activity 5994.
Phytophthora megasperma f.sp. *glycinea*, effects on hydroxymethylglutaryl-CoA reductase activity, *Glycine max* cell culture 5507.
plants, digestion, rumen microorganisms, reviews 3669.
Pseudomonas phasaelica cell adhesion, extracellular polymers, polysaccharides, structure, *Phaeocharis vulgaris* 2785.
structure, antifungal activity, *aculeacin A*, *papulacandin B*, *Candida albicans* 9108.
Cell-free system,
beauvericin biosynthesis, *Beauveria bassiana* 3132.
page 77, DNA, recombination, methodology 648.
Cellulobiose
biodegradation, β -D-glucosidase activity, soil microorganisms 3672.
carbon sources, effects on cellulolytic enzymes excretion, *Schizopyllum commune* 6874.
conversion, ethanol production, immobilized cells+immobilized enzymes, *Saccharomyces cerevisiae*+ β -D-glucosidase 8664.
conversion, use β -D-glucosidase immobilized enzymes+*Zymomonas mobilis* immobilized cells 18.
effects on *Thermomonospora fusca* cellulase activity 1804.
feedback inhibition, cellulose hydrolysis, cellulase, *Thermomonospora* 8692.
fermentation, ethanol, *Candida wickerhamii* 985.
glucose, xylose, mixtures, fermentation, ethanol production, mixed culture, *Clostridium saccharolyticum*, *Zymomonas anaerobia* 8661.
hydrolysis, β -D-glucosidase, *Thermoanaerobacter ethanolicus* 3493.
rate, β -D-glucosidase enhancement, *Streptomyces graticolor* 4345.
xylosyl acceptors, endo-1,4- β -D-xylanase, *Cryptococcus albidus* 3671.
Cellulobiose dehydrogenase,
purification, characterization, *Fomes annosus* 5976.
Cellulase,
activity, *Cellulomonas fimi* 6017.
activity, cellulose conversion, glucose production, *Trichoderma* 14.
activity, fermentation, cellulose, hemi-cellulose, *Trichoderma* 3622.
activity, lignocelluloses hydrolysis, ethanol production, 2,3-butanediol production, *Trichoderma reesei*, *Trichoderma harzianum*, *Klebsiella pneumoniae*, *Saccharomyces cerevisiae*, *Zymomonas mobilis* 5274.
activity, measuring techniques, mathematical models 911.
activity, *Thermomonospora fusca*, cellulobiose, glucose, metals ions, effects on 1804.
affinity chromatography 4302.
amino acid sequence, homology, exo-cellulohydrolase, *Trichoderma reesei* 3509.
aspartic proteinase hydrolysis, *Trichoderma reesei* 87.
Aspergillus aculeatus, *Botryodiplodia theobromae*, association, fruit rot, post-harvest decay, oranges 2049.
Aspergillus fumigatus production 1807.
Aspergillus niger, biosynthesis 2581.
Aspergillus niger, physicochemical properties 2592.
Aureobasidium 86.
Bacteroides cellulosolvens 7740.
binding factors, cellulose hydrolysis, *Clostridium thermocellum* 931.
biodegradation, *Daucus carota* 8538.
biodegradation, man-made lignocelluloses, *Trichoderma* 2711.
biodegradation, *Alternaria brassicae* var. *sarson* 8602.
biosynthesis, ATP levels, *Trichoderma reesei* 3506.
biosynthesis, nitrogen sources effects on, *Trichoderma viride* 883.
biosynthesis, nitrogen sources, *Trichoderma viride* 3508.
Cellulase, (continued)
biosynthesis, *Pestalotiopsis versicolor* 13.
biotechnology, characterization, *Streptomyces flavogriseus* 5192.
Cellulomonas flavigena, purification, characterization 915.
cellulose hydrolysis, batch culture 8537.
cellulose hydrolysis, bioreactors, *Trichoderma viride*, *Trichoderma longibrachiatum*, *Geotrichum candidum* 4355.
cellulose hydrolysis, feedback inhibition, glucose, cellobiose 8692.
cellulose hydrolysis, microfibrils formation, *Trichoderma reesei* 3472.
cellulose hydrolysis, pH effects on, soil isolates, *Bacillus* 7882.
cellulose hydrolysis, pretreatment, zinc chloride, hydrochloric acid 3656.
cellulose hydrolysis, reactors, *Trichoderma*, *Geotrichum candidum* 7736.
cellulose hydrolysis, *Trichoderma reesei* 6024.
Clostridium stercoarum, characterization, cellulose hydrolysis 1738.
Cocoa por residues cellulose hydrolysis 8678.
complexes, fractionation, *Aspergillus terreus* 4309.
deficient mutant, *Sporotrichum pulverulentum*, lignin biodegradation, lignocelluloses 1886.
enzymatic activity, lignocelluloses biodegradation, microorganisms 3688.
Erpex lacteus, purification, characterization 938.
excretion, carbon sources, cellobiose, cellulose effects on, *Schizopyllum commune* 6874.
fermentation, crop residues, ethanol production, *Malus* 3623.
furg, spoilage, calcium chloride prevention, pickles, fermented food 8699.
genes, *Cellulomonas fimi*, transformation, gene expression, host systems, *Escherichia coli* 6018.
genes, introns excision, methodology, clones, *Trichoderma reesei* 8568.
glucose production, cellulose conversion, *Gossypium hirsutum*, *Verticillium wilt* 3683.
Hordeum vulgare straw pretreatment, effects on bacteria fermentation 1045.
+hydrogen peroxide, ethanol production, lignocelluloses fermentation 5303.
hydrolysis, cellulose, melanin effects on 8530.
hydrolysis, cellulose, *Salix caprea* 8676.
hydrolysis, cellulose, *Trichoderma longibrachiatum*, *Trichoderma viride*, *Geotrichum candidum* 6040.
hydrolysis, hardwoods, glucose production 5160.
hydrolysis, lignocelluloses, cell walls, steam disruption 5278.
hydrolysis, lignocelluloses, high pressure carbon dioxide+steam pretreatment, crop residues 1746.
hydrolysis, lignocelluloses, solvents pretreatment 8683.
hydrolysis, lignocelluloses, use production, single-cell protein 1885.
hydrolysis, sawdust, immobilized cells, radiation polymerization, *Trichoderma reesei* 6949.
induction activity, mycelia, *Trichoderma reesei* 4298.
kinetics cellulose hydrolysis 84.
kinetics cellulose hydrolysis, *Trichoderma* 85.
lignocelluloses hydrolysis, solvents pretreatment 8536.
lignocelluloses hydrolysis, sugars, assays, 2,4-dinitroarsocyclic acid 8680.
lignocelluloses hydrolysis, sugars production, kinetics, models 3474.
lignocelluloses hydrolysis, use sugar fermentation, reviews, microorganisms 2599.
multienzyme complexes, purification, characterization, *Trichoderma reesei* 1751.
overproduction, *Sporotrichum pulverulentum*, mutants, characterization 878.
Penicillium funiculosum, hydrolysis, lignocelluloses 3484.
production, activity, reviews, *Clostridium* 100.
production, activity, *Spicellum roseum*, comparison, *Trichoderma reesei* 3497.
production, ATP levels, *Trichoderma reesei* 4334.
production, bacteria, fungi, screening projects 6883.
production, binding cell walls, *Cellulomonas flavigena* 6679.
production, *Cellulomonas flavigena* 8545.
production, continuous culture, *Trichoderma reesei*, characterization 101.
production, gene expression, *Trichoderma reesei*, strains development 7738.
production, growth conditions, effects on, *Aspergillus fumigatus* 6015.
production, immobilized cells, *Trichoderma reesei* 3466.
production, immobilized cells, *Trichoderma reesei* 6021.
production, mutants, *Alternaria alternata* 3453.
production, mutants, *Alternaria alternata* 3463.
production, mutants selection, *Trichoderma reesei* 1750.
production, nutrient requirements, U.V. radiation mutagenesis, *Penicillium funiculosum* 8532.
production, *Pleurotus sajor-caju* 90.
production, *Scopulariopsis breviculax*, composting, animal wastes 928.
production, thermal stability, *Thielavia terrestris* 5181.
production, *Trichoderma reesei*+*Aspergillus wentii* mixed culture, media (culture) association 1736.
production, *Trichoderma reesei* 3492.
production, *Trichoderma reesei*, catabolite repression, resistant mutant, screening, media (enrichment) 1797.
Pseudocercospora helveticoides, biosynthesis, activity, isolation, characterization 7761.
purification, affinity chromatography, *Chaetomium cellulolyticum* 5143.
purification, characterization, conidia, fruit bodies, *Termitomyces* 6844.
purification, characterization, *Sporotrichum thermophile* 4272.
purification methodology, affinity chromatography, *Trichoderma longibrachiatum* 882.
purification, methodology, *Fusarium lini* 3451.
recovery, cellulose, *Trichoderma reesei* 6022.
role *Sclerotinia sclerotiorum*, pathogenesis, virulence, *Helianthus annuus* 2010.
samples, containing activity, carboxymethylcellulase, endo-1,3- β -D-xylanase, *Aspergillus niger*, *Trichoderma reesei* 8533.
Schizopyllum commune, purification, amino acid sequence, characterization 7728.
Trichomonospora curvata, biosynthesis, catabolite repression resistant mutant 1746.
Trichoderma harzianum, lignocelluloses hydrolysis, factors affecting 1892.
Trichoderma harzianum production, *Oryza sativa* straw utilization 3725.
Trichoderma reesei, bagasse hydrolysis, sugars production 1808.
Trichoderma reesei, crop residues fermentation, production, bulanol, acetone, *Clostridium acetobutylicum* 7832.
Trichoderma reesei, digestion (anaerobic), food processing wastes, methanogenesis, *Beta vulgaris* 6691.
Trichoderma reesei, genes, cloning 3498.
Trichoderma reesei, hydrolysis, lignocelluloses 7833.
Trichoderma reesei, penicillium, *Thielavia terrestris*, sporotrichum cellulophilum, physicochemical properties, comparison 8008.
Trichoderma reesei, production, activity 3496.
Trichoderma reesei, yield, mutants selection, nystatin resistance 60.
Trichoderma viride, acids, biodegradation, *Triticum aestivum*, straw 6166.

Cellulase, (continued)

Trichoderma viride, adsorption, cellulose 1802.
Trichoderma viride, hydrolysis, cellulase, paracetic acid, sodium hydroxide, phosphoric acid, effects on 188.
use, subterranean clover leaf residue purification 8460.

Cellulolytic bacteria,

cellulose decomposition, soil 6339.
composting, sewage sludge, crop residues, *Oryza sativa* 7492.
hemicellulose degradation, staining detection 1634.
media (culture), bagasse hydrolysis, mathematical models, single-cell protein production 4353.
soil microorganisms, methoxychlor effects on 9024.
straw biodegradation 6148.

Cellulolytic enzymes,

activity, aerobic bacteria, media (enrichment) 35.
activity, fungi 6871.
activity, lignocellulases, hydrogen peroxide pretreatment, *Trichoderma reesei* 3652.
cell surface organelles, cellulase binding, *Clostridium thermocellum* 5162.
cellulose hydrolysis, sugars 3386.
cellulose hydrolysis, bakers, fermentation, ethanol, cost-benefit analysis, *Trichoderma reesei* 5299.
ethanol fermentation, fuels, microorganisms 162.
excretion, carbon sources, cellulase, cellobiose effects on, *Schizophyllum commune* 6874.
hydrolysis, carboxymethylcellulose, xylan, *Chaetomium cellulolyticum* 1752.
hydrolysis, mathematical models, wood, *Populus* 8539.
hydrolysis, paper, virus stimulation 4330.
immobilized enzymes, *Macrophoma phaseolina* 8571.
microorganisms, cleaning, membranes, filtration, industrial water systems 57.
microorganisms, crop residues conversion, silage, fermentation 213.
production, *Geotrichum candidum* 6875.
production, optimization, *Fusarium* 1811.
production, *Pleurotus sajor-caju* 90.
production, *Trichoderma reesei* 5158.
production, use bagasse, *Trichoderma* 6023.
purification, characterization, activity, *Bacillus* 5182.

Cellulolytic microorganisms,

crop residues, ethanol production 3637.
ecological distribution, relationship wood decay, coastal wastes 8196.
enzymes, macromolecules hydrolysis, pretreatment effects on 187.
fungi, fermentation 1004.
fungi, single-cell protein production, cellulase fermentation, crop residues 3726.
lignocelluloses hydrolysis, industrial wastes, paper mills, fermentation, fuels production 7781.

Cellulomonas,

endo-1,3- β -D-xylanase, xylan hydrolysis 2566.
glycerol dehydrogenase, purification, characterization 8591.
growth, enzymatic activity production, carbohydrates substrates 32.
media (culture), bagasse hydrolysis, mathematical models, single-cell protein production 4353.
single-cell protein production, bagasse fermentation 1734.

Cellulomonas fimi,

cellulase activity 6017.
cellulase genes, transformation, gene expression, host systems, *Escherichia coli* 5019.

β -D-glucosidase characterization 6833.

Cellulomonas flavigena,

cellulase production, binding cell walls 6879.
cellulase, purification, characterization 915.
production, cellulase, hemicellulase 8545.

Cellulose,

-animal wastes, digestion (anaerobic), cattle 7513.
beads, use β -D-galactosidase immobilized enzymes, *Escherichia coli* 72.
binding, cell surface organelles, cellulolytic enzymes, *Clostridium thermocellum* 5162.

biodegradation, U.V. radiation mutants, *Aspergillus fumigatus* 2707.
biodegradation, β -D-glucosidase activity, immobilized cells, *Alcaligenes faecalis* 5190.

biodegradation, biomass measurements, monitoring, computer applications, fermentation, *Sporocytophaga myxococcoides* 6165.

biodegradation, hydrogen peroxide, free radicals, brown rot, *Poria placenta* 6173.
biodegradation, microorganisms, reviews 4436.

biodegradation, soil temperature soil nitrogen, levels, soil microorganisms, taiga 5544.

biosynthesis, industrial applications, reviews, microorganisms 8619.

biosynthesis, reviews, bacteria 4359.

carbon sources, effects on cellulolytic enzymes excretion, *Schizophyllum commune* 6874.

cellulase hydrolysis, bioreactors, *Trichoderma viride*, *Trichoderma*

longibrachium, *Geotrichum candidum* 4355.

cellulase hydrolysis, melanin, effects on 8530.

cellulase recovery, *Trichoderma reesei* 6022.

cellulolytic enzymes hydrolysis, sugars fermentation, ethanol, cost-benefit

analysis, *Trichoderma reesei* 5299.

Cocoa crop residues, hydrolysis, cellulase, *Trichoderma reesei* 6878.

conversion, bioreactors, kinetics 5175.

conversion, citric acid production, models 3432.

conversion, glucose production, cellulase activity, *Trichoderma* 14.

conversion, glucose production, *Gossypium hirsutum*, wilt, cellulase 3683.

conversion, yeasts, fermentation, books 2539.

decomposition, cellulolytic bacteria, soil 6339.

degradation, methanogenesis, *Acetivibrio*

cellulolyticus+*Desulfovibrio*+*Methanosarcina barkeri* mixed culture 2186.

fermentation, *Acetivibrio cellulolyticus* 172.

fermentation, association, nutrient concentrations, batch culture, *Clostridium*

thermocellum 4443.

fermentation, cellulase activity, *Trichoderma* 3622.

fermentation, *Clostridium*, *Clostridium acetobutylicum* 5111.

fermentation, *Clostridium thermocellum*+*Acetogenium*ivil mixed culture 8671.

fermentation, enzymatic activity measurements, solid wastes 545.

fermentation, ethanol, production, yeasts, *Fusarium*, *Mucor*, reviews 6107.

fermentation, production, acetic acid, ethanol, *Clostridium thermocellum* 5969.

fermentation, production, ethanol, n-butanol, acetic acid, n-butyric acid,

Clostridium 6150.

Cellulose, (continued)

fermentation, single-cell protein production, crop residues, cellulolytic

microorganisms 3726.

fermentation, yeasts 6955.

hydrolysis, batch culture, cellulase 8537.

hydrolysis, binding factors, cellulase, *Clostridium thermocellum* 931.

hydrolysis, bioreactors comparison 4441.

hydrolysis, cellulase, microfibrils formation, *Trichoderma reesei* 3472.

hydrolysis, cellulase, pH effects on, soil isolates, *Bacillus* 7682.

hydrolysis, cellulase, pretreatment, zinc chloride, hydrochloric acid 3656.

hydrolysis, cellulase, reactors, *Trichoderma*, *Geotrichum candidum* 7736.

hydrolysis, cellulase, *Trichoderma longibrachium*, *Trichoderma viride*,

Geotrichum candidum 6040.

hydrolysis, cellulase, *Trichoderma reesei* 6024.

hydrolysis, cellulolytic enzymes, books 3386.

hydrolysis, *Clostridium stercorarium*, cellulase characterization 1738.

hydrolysis, feedback inhibition, glucose, cellobiose, cellulase, *Thermomonospora*

8692.

hydrolysis kinetics, cellulase, *Trichoderma* 85.

hydrolysis, optimization, bioreactors, *Trichoderma reesei* 3658.

hydrolysis, *Trichoderma*, glucose formation, kinetics mathematical models 1798.

hydrolyzates, fermentation, ethanol production, optimization 8660.

kinetics cellulase hydrolysis 84.

mineralization, role, chitin, soil microorganisms 4631.

Myceliophthora thermophila biodegradation, taxonomy 1889.

Penicillium funiculosum β -D-glucosidase hydrolysis 877.

-pigs animal wastes, substrates, digestion (anaerobic) 2333.

preservatives, prevention, biodegradation, soil microorganisms 7302.

Quercus rubra, Quercus alba, Xylobolus frustulatus, biodegradation 3674.

Salix caprea, cellulase hydrolysis 8676.

supports, immobilization, proteinase, activity, *Bacillus subtilis* 5999.

Trichoderma viride cellulase adsorption 1802.

Trichoderma viride, cellulase, hydrolysis, paracetic acid, sodium hydroxide,

phosphoric acid, effects on 188.

Trichoderma viride, hydrolysis, microwave radiation pretreatment, bagasse, straw,

Oryza sativa 5128.

Cellulose xanthate,

inhibition, *Pseudocercospora herpotrichoides* spores dispersal, eye spot,

Gramineae 8058.

Cellulolytic enzymes,

activity, lignocellulases, ozone pretreatment, rumen microorganisms 3459.

Celtis australis,

host-pathogen interactions, *Uncinula clintonii*, isolation, morphology 8191.

Cenchrus ciliaris,

ergot, *Claviceps fusiformis*, pathogenicity 5421.

Cenococcus geophilus,

ectomycorrhizae formation, *Coniferales* seedlings, high-altitude environments,

mines 5547.

isolation, pure culture, methodology, nutrient requirements, reviews 829.

ectomycorrhizae, mycelia, inoculation, seedlings, *Pinus banksiana* 7227.

Cenococcus graniflorus,

carbon-13 distribution, fatty acids, N.M.R. 8957.

Central nervous system,

immunoelectron microscopy, localization, rabies virus, antigens, embedding,

methodology 4999.

side effects, 9-(2-hydroxyethoxymethyl)guanine, antiviral activity, clinical

aspects, man, reviews 474.

Centrifugation,

bacteremia detection methodology, man 2458.

density gradients, influenza A virus hemagglutinins isolation, bromelain cleavage

4994.

density gradients, methodology, isolation, protoplasts, *Saccharomyces cerevisiae*

9334.

density gradients, scrapie agent purification 4985.

effects on agglutination, *Brucella*, clinical microbiology 699.

-lysis, blood culture, detection, bacteremia 755.

-lysis blood culture, isolation, *Mycobacterium chelonae* 1671.

lysis, blood culture, septicemia diagnosis, man 5032.

lysis, comparison, *Bacter* test, detection, bacteremia, man 3313.

-lysis, *Histoplasma capsulatum* blood culture recovery methodology 814.

-lysis, isolation, yeasts, bacteria, blood culture 1529.

lysis, recovery system, bacteria, fungi, clinical trials 4159.

Centrifuges,

use, gram stain preparation 1618.

Centromeres,

DNA, isolation methodology, transformation, gene libraries, *Saccharomyces*

cerevisiae 820.

Cephalosporium virens,

red rust, *Camellia sinensis* 2019.

Cephalixin,

actidiazic acid, antibiotic synergism, antibacterial activity, *Escherichia coli*

1390.

antibacterial activity, *Pseudomonas aeruginosa* 7377.

antibacterial activity, reviews 9184.

comparison, antibiotic FK 027, antibacterial activity, bacteria 2316.

containing, media (isolation), *Bordetella bronchiseptica* 7596.

Cephalixin amides,

preparation, *Xanthomonas* 6823.

Cephaloridine,

β -lactamase substrates, antibiotics deactivation, *Staphylococcus aureus* 5156.

Cephalosporin C,

chemical modification, 7 α -hydroxycephalosporin C formation, *Streptomyces*

clavuligerus 3096.

conversion, 7-phenoxycetamide- α -cephalosporanic acid, penicillin acyltransferase,

mutants, *Penicillium chrysogenum* 9183.

production, association arthropods, *Acremonium chrysogenum* 4829.

Cephalosporins,

activity, conferences 847.

antibacterial activity 504.

antibacterial activity 2260.

antibacterial activity 4618.

antibacterial activity, *Bacteroides* 9185.

antibacterial activity, clinical isolates, bacteria 6509.

antibacterial activity comparison, cephalosporins, *Pseudomonas aeruginosa* 508.

antibacterial activity, Enterobacteriaceae, *Staphylococcus aureus* 3099.

ephalosporins, (continued)

- antibacterial activity, gram-negative bacilli 3086.
antibacterial activity, *Pseudomonas aeruginosa* 4825.
antibacterial activity, *Pseudomonas aeruginosa* 7377.
antibacterial activity, *Staphylococcus aureus*, *Streptococcus*, *Haemophilus influenzae* 1389.
antibacterial activity, *Staphylococcus aureus*, *Streptococcus agalactiae* 919.
antibacterial activity, structure-activity relationships 5765.
antibacterial activity, toxicity, pharmacokinetics, reviews 5767.
antibacterial activity, use 4817.
antibiotic FR 17027, antibacterial activity, β -lactamase stability 7430.
antibiotic HR 810, antibacterial activity, gram-negative bacteria clinical isolates 7429.
antibiotic resistance, β -lactamase, *Proteus vulgaris* 2194.
antibiotic resistance, bacteria 7333.
antibiotic resistance, clavulanic acid inhibition β -lactamase, *Bacteroides fragilis* 3019.
antibiotic resistance, cross-resistance, penicillins, *Enterobacter*, *Klebsiella*, *Pseudomonas aeruginosa* 7352.
antibiotic sensitivity testing 1385.
antibiotic sensitivity testing, *Streptococcus* group D, media effects on 3095.
biosynthesis pathway, bacteria 491.
S-(carboxymethyl)-D-cysteine biosynthesis, *Pseudomonas putida* 4822.
chemical modification, production, antibacterial activity 1306.
colorimetry, clinical isolates, β -lactamase production 487.
cross-resistance, methicillin, *Staphylococcus aureus* 6412.
enhancement, bacterial activity, amikacin, gentamicin, *Enterobacteriaceae*, clinical isolates 6513.
 β -lactamase hydrolysis, kinetics, *Bacillus cereus* 4279.
2-(methoxycarbonyl)-methylene-3-cephem-4-carboxylic acids, derivatives, synthesis, antibacterial activity 9187.
Nocardia asteroides antibiotic sensitivity testing 3090.
production, immobilized enzymes, penicillin amide 4045.
Pseudomonas aeruginosa antibiotic sensitivity testing 1383.
resistance, *Citrobacter freundii*, *Citrobacter diversus* 6417.
stability, N-methylthiotetrazole side chains 8343.
Streptococcus group D sensitivity 9188.
synthesis, immobilized enzymes 4795.
synthesis, Penicillin amidase, *Kluyvera citrophila*, *Pseudomonas melanogenum* 505.
ephalosporium
phosfin, purification, characterization 8523.
ephalosporium acremonium
conversion, 2-(L- α -aminoacyl)-L-cysteine-N-hydroxy-D-valine 5777.
penicillin N synthetase, penicillin biosynthesis 9195.
ephalosporium sacchari
penicillin biosynthesis pathway, stereochemistry 6519.
penicillin, sulfur analogs, synthesis 8353.
ephalosporium caerulens
fatty acid synthetase active site peptides, amino acid sequence, comparison, *Saccharomyces cerevisiae* 8529.
fatty acid synthetase, cerulenin, antibiotic resistance, purification, characterization, comparison, *Saccharomyces cerevisiae* 8528.
ephalosporium coremioides
fouling, acetone recovery systems 7525.
ephalosporium gramineum
stripe, planting dates effects on, yield, USA, Kansas, *Triticum aestivum* 7974.
ephalosporium hemichellus
hemichellulase, hydrolysis, hemichellulose, p-chloromercuribenzoic acid, sulphydryl groups inhibitors effects on 4354.
ephalothin
antibacterial activity, *Enterobacteriaceae* 3099.
antibacterial activity, *Staphylococcus aureus* 8351.
antibiotic sensitivity testing, disc-diffusion test, clinical isolates, bacteria 4819.
antibiotic sensitivity testing, *Escherichia coli* 7440.
antibiotic sensitivity testing, quality control 4828.
antibiotic sensitivity testing, *Streptococcus* group D, media effects on 3095.
antibiotic synergism, rifamycin, antibacterial activity, *Staphylococcus epidermidis* 8359.
antibiotic tolerance, *Streptococcus* 6434.
Citrobacter freundii resistance, incidence 6416.
Clostridium perfringens drug sensitivity testing 3085.
ephams
Streptomyces clavuligerus, biosynthesis, regulation, carbon sources, aeration 3097.
ephameycin C
biosynthesis, defective mutant, *Streptomyces lactamdurans*, characterization 8380.
ephameyins
biosynthesis, *Streptomyces griseus*, *Streptomyces lactamdurans*, media (culture), composition, effects on 6517.
Streptomyces griseus, *Streptomyces lactamdurans*, biosynthesis, antibacterial activity 6518.
ephapirin
antibacterial activity, *Enterobacteriaceae* 3099.
ephem
production, carbon sources, regulation, *Streptomyces clavuligerus* 6522.
ephems
derivatives, synthesis 6521.
ephotetan
antibacterial activity 6508.
ephradine
antibiotic resistance, intestinal microflora, *Escherichia coli*, man 6419.
eratoasidium
eye spot, Gramineae, soil microorganisms, antagonism 7208.
eratoasidium cornigerum
symbiosis, *Goodyera repens*, *Dactylorhiza purpurella*, glucose uptake 5645.
eratoxystis
blue stain, *Notofagus*, isolates, characterization 5598.
mixed infection, ips typographus, defensive mechanisms, *Picea abies*, Norway 1237.
eratoxystis fagacearum
wilt, aerial photography surveys, *Quercus*, USA, Texas 8189.
wilt, pathogenesis, *Quercus laevis*, USA, South Carolina 2115.
wilt, *Quercus*, epidemiology, USA, West Virginia 1236.
wilt, survival, wood, storage conditions, *Quercus* 8956.
eratoxystis fimbriata
black rot, effects on, *Ipomoea batatas*, farnesol dehydrogenase 7187.

Ceratocystis fimbriata, (continued)

- wilt, disease control, disease resistance rootstocks, pruning, Brazil, *Mangifera indica* 5440.
Ceratocystis minor
blue stain, seasonal variations, hypersensitive response, *Pinus ponderosa* 8193.
identification, immunodiffusion 506.
Ceratocystis nigra
blue stain, effects on water conductivity, *Pinus ponderosa* 8194.
Ceratocystis penicillata
blue stain, pathogenicity, water stress, *Picea abies* 8173.
Ceratocystis polonica
blue stain, pathogenicity, water stress, *Picea abies* 8173.
Ceratocystis ulmi
biological control, fungi 6330.
Dutch elm disease, biological control, antagonism, *Streptomyces albobacillus*, *Streptomyces griseus*, inoculation, *Ulmus americana* 2890.
Dutch elm disease, disease control, *Ulmus* 5606.
Dutch elm disease, disease resistance compounds, antifungal activity, *Ulmus americana* 366.
Dutch elm disease, disease resistance, mansonioides isolation, antifungal activity, *Ulmus americana* 3926.
Dutch elm disease, disease resistance, plant breeding, *Ulmus* 2870.
Dutch elm disease, disease resistance, plant breeding, *Ulmus* 8186.
Dutch elm disease, forest management, Canada 2922.
geographical isolates, pathogenicity, hypovirulence, Dutch elm disease, *Ulmus* 8192.
infection, phytoalexins induction, defensive mechanisms, *Ulmus glabra* 5500.
Ceratomyella
blue stain, *Pinus caribaea* var. *hondurensis* wood, disease control 6331.
Cercopidae
biological control, *Metarhizium anisopliae* inoculum production, factors affecting 5266.
Cercospora
carosporin, photoinduction, production, ions, oxygen, superoxide 7901.
disease resistance plant breeding, *Vigna unguiculata* 8899.
Cercospora arachidicola
leafspot, *Arachis*, disease resistance 5491.
leafspot disease control, *Arachis hypogaea* 3793.
leafspot, effects on, *Arachis hypogaea*, yield 7934.
leafspot, pathogenesis, effects on growth, *Arachis hypogaea* 7945.
Cercospora beticola
phytoalexins, inhibition protons pumps, microsomes, *Pisum sativum* 8744.
toxins, inhibition, *Pisum sativum*, protons, uptake 7122.
Cercospora cajani
disease resistance plant breeding, *Cajanus cajan* 8899.
Cercospora caryocarpae
leafspot, pathogenesis, *Phaseolus mungo*, planting density, time, effects on 7929.
Cercospora coffeicola
eyespot, antracnose, shading, rainfall, seasonal variations, plantations, *Coffea arabica* 273.
Cercospora platensis
leafspot, *Eichhornia crassipes* 8818.
Cercospora rodmanii
antifungal activity, aromatic compounds, storage cells, leaves, role disease resistance, *Eichhornia crassipes* 8813.
Cercospora sojae
leafspot, Glycine max, disease resistance genes, Rcs gene 1172.
Cercosporidium personatum
leafspot disease control, *Arachis hypogaea* 3793.
leafspot, effects on, *Arachis hypogaea*, yield 7934.
leafspot, pathogenesis, effects on growth, *Arachis hypogaea* 7945.
Cercosporin
photoinduction, production, ions, oxygen, superoxide 7901.
Cereals
detection, *Fusarium* mycotoxins, use, gas chromatography 7077.
fermented food, production, role, lactic acid bacteria, reviews 211.
food, grain, mycotoxins food contamination, methodology 225.
grain quality, association mycotoxins food contamination 226.
yeasts contamination, identification, characterization 5471.
Cerebrospinal fluid
bacteria antigens, detection, agglutination comparison counter immunoelectrophoresis 2483.
bacteria, detection methodology 2488.
enzyme-linked immunosorbent assay, detection, immunoglobulin G, *Mycobacterium tuberculosis*, proteins, meningitis, man 5773.
herpes simplex virus seroepidemiology, man, enzyme immunoassay 614.
herpes simplex virus 1, antigens, detection, enzyme-linked immunosorbent assay, encephalitis, man 652.
immunoglobulin G measurement, enzyme-linked immunosorbent assay methodology, *Mycobacterium tuberculosis* meningitis, methodology 7590.
Japanese encephalitis virus antibodies, man, radioimmunoassay, detection 615.
latex agglutination, comparison, phagebact test, detection, *Haemophilus influenzae* type b, antigens 795.
man, *Haemophilus influenzae* β -lactamase detection methodology 1643.
man, *Haemophilus influenzae* b polyribosome phosphate antigens detection, agglutination tests 1584.
Phagebact test, diagnosis, bacteria meningitis, man 3321.
specimens, bacteria contamination incidence, meningitis false-positives, man 4785.
Cerionomyces ceraceus
wood biodegradation 1891.
Ceratomyces trifurcata
population density, distribution, disease transmission, bean pod mottle virus, Glycine max 243.
Cerulenin
antibiotic resistance, fatty acid synthetase, purification, characterization, *Cephalosporium caerulens*, comparison, *Saccharomyces cerevisiae* 8528.
effects on *Aspergillus parasiticus* aflatoxins biosynthesis 1075.
Cervical microflora
antibiotic resistance, buffaloes 2205.
Lactobacillus, biochemical characteristics, identification, methodology 781.
Cesium chloride
density gradients, ultracentrifugation, foot-and-mouth disease virus 6736.
density gradients, viruses purification methodology 642.

- Cesium trifluoroacetate**,
use, isolation, purification, DNA, *Micrococcus lysodeikticus*, methodology 5918.
- Ceterach officinarum**,
rhizosphere microorganisms, phyllosphere microorganisms, fungi 8981.
- Cetocycline**,
biosynthesis, *Nocardia sulphurea*, characterization 2247
- CGA 64250**,
effects on, lipid composition, *Taphrina deformans* 2084.
- CGA 78039**,
disease control, crown gall, *Malus pumila* 343.
- CGA 15281**,
disease control, crown gall, rootstocks, *Malus pumila* 342.
- CGA 15281**,
soil microorganisms biodegradation, structure-activity relationships, orchards, *Prunus persica* 5686.
- Chaetomacin**,
Bacillus, antifungal activity, *Chaetomium olivaceum* 4067.
- Chaetomium**,
cellulolytic enzymes activity 6871,
mycotoxins, food contamination, man, books 5798.
soil microorganisms, aluminum phosphate utilization, phosphorus sources 2151.
- Chaetomium aureum**,
3,3',6,6'-tetrahydroxy-5,5'-dimethyl-2,2'-bi-p-benzoquinone, antibacterial activity, antifungal activity 8367.
- Chaetomium cellulolyticum**,
cellulase, purification, affinity chromatography 5143,
cellulolytic enzymes, hydrolysis, carboxymethylcellulose, xylan 1752,
fermentation, *Zea mays* crop residues, n-butylamine pretreatment 183,
glucose metabolism, single-cell protein production, mathematical models 5958,
lignocellulose fermentation, biomass measuring techniques, nitrogen-15, mass spectroscopy 5310.
single-cell protein production, bagasse biodegradation, sodium hydroxide pretreatment 1715.
single-cell protein production, lignocellulose biodegradation, pretreatment, sodium hydroxide, hydrogen fluoride, steam 1712.
single-cell protein production, reactors, fermentation, straw, *Triticum aestivum* 1711.
straw, biodegradation, pretreatment, steam, ammonia, liquid culture 2696.
- Chaetomium cetraceum**,
2-(but-1,3-dienyl)-3-hydroxy-4-(penta-1,3-dienyl)-tetrahydrofuran biosynthesis 3532.
- Chaetomium globosum**,
biodegradation, wool, control, biocides 1288.
- Chaetomium olivaceum**,
antifungal activity, chaetomacin, *Bacillus* 4067.
- Chalasin**,
extracellular enzymes, glucose isomerase, glucose isomerase, characterization 7742.
xylose isomerase, extracellular enzymes, production 91.
- Chalcone**,
Corynebacterium equi hydrogenation carbon bonds 6153.
- Chamaelea gallina**,
bioaccumulation, coliforms, microbial pollution, coastal waters 4128.
- Champagne**,
aging, *Saccharomyces vini* 4405.
aroma compounds, identification, gas chromatography, I.R. spectroscopy, biosynthesis, *Saccharomyces* 7813.
aroma compounds, *Saccharomyces* effects on 4417.
- Chandramycin**,
production, purification, characterization, antibacterial activity, *Streptomyces lydicus* 9202.
- Chaoborus flavicinctus**,
biological control, susceptibility, pathogens, *Lagenidium giganteum* 5235.
- Charcoal rot**,
Helianthus annuus, etiology, *Alternaria alternata*, *Fusarium roseum*, *Fusarium solani*, *Macrophomina phaseolina*, *Phoma macdonaldii*, *Rhizopus arrhizus* 4551.
Macrophomina phaseolina, *Cucumis melo*, pathogenesis 2033.
Macrophomina phaseolina, disease resistance, *Sorghum bicolor* 8890.
Macrophomina phaseolina, Glycine max, *Bradyrhizobium japonicum*, rhizobitoxine, role, protection 4509.
- Cheddar cheese**,
aflatoxins biosynthesis, *Aspergillus flavus*, *Aspergillus parasiticus*, temperature effects on 3703.
production, phase 646 (MLB) replication, dairy starters, *Streptococcus lactis* 4456.
production, use, dairy starters, *Streptococcus cremoris*, proteinase deficiency 2731.
ripening, stimulation, *Streptococcus cremoris*, intracellular proteinase 193.
- Chesna**,
brines, filtration, removal yeasts, bacteria 192.
coliforms growth, nitrate+chloric acid effects on 7842.
contamination, milk relationship 5348.
dairy starters, fungi 6985.
dairy starters, strains synergism, acid production 7866.
fermentation, *Streptococcus lactis* acid bacteria 3693.
food contamination, food processing, hygiene, organoleptic evaluation 8709.
infection, *Staphylococcus aureus* growth, enterotoxins production 5381.
pasteurization, survival, *Staphylococcus aureus*, *Salmonella* 1902.
Penicillium food contamination, mycotoxins detection, identification 7080.
production, biotechnology, microorganisms, dairy starters 5328.
production, dairy starters, phages infection, isolation, characterization, *Streptococcus lactis* subsp. *lactis* 5337.
production, industrial applications, fungi, yeasts 9169.
production, lactic acid bacteria, aflatoxin B1 effects on proteolytic enzymes 8730.
production, milk-clotting enzymes, *Mucor racemosus* 3695.
production, skim-milk powder, milkfat, *Lactobacillus* 4460.
production, temperature effects on gas production, *Clostridium tyrobutyricum* 4462.
production, use, milk products, *Penicillium roqueforti* 2734.
proteolysis, dairy starters, temperature, effects on 1907.
proteolysis, renin, *Mucor pusillus*, *Mucor miehei*, *Endothia parasitica* 2741.
ripening, cheese flavor, stimulation, triacylglycerol lipase, proteinase, fungi 7860.
- Chesne**, (continued)
ripening, dairy starters, *Oospora lactis* 6978.
ripening, L-phenylalanine conversion, phenethyl alcohol production, ripening 6993.
Roquefort cheese, mycotoxins levels, Egypt 7058.
Staphylococcus aureus growth, pH, water activity, temperature 6960.
starter cultures, books 5095.
whey, digestion (anaerobic), reactors, methane production 3197.
yeasts species 5342.
- Chesse flavor**,
ripening, cheese, stimulation, triacylglycerol lipase, proteinase, fungi 7860.
- Chelantes catenensis**,
rhizosphere microorganisms, phyllosphere microorganisms, fungi 8981.
- Chelates**,
transition metals, affinity chromatography, proteins purification 3430.
- Chelating agents**,
iron, catecholamide, fungistasis, bacteriostasis 448.
iron, inhibition *Clostridium botulinum* toxins, pork, minced meat 7035.
iron, parabactin, bis-N1,N6-(2,3-dihydroxybenzoyl)spermidine, antiviral activity, ribonucleoside-diphosphate reductase, DNA biosynthesis, herpes simplex virus 1 vesicular stomatitis virus 8335.
- Chemical composition**,
actaplanin, *Actinoplanes missouriensis* biosynthesis, isolation 4870.
- Chemical control**,
fungicides, fungi, growth, paints films 1290.
insecticides: fungicides, *Hordeum*, *Rhopalosiphum maidis* 6317.
molds, biodegradation, monuments 1029.
plant diseases, epidemiology mathematical models, reviews 4496.
- Chemical modification**,
cephalosporins, production, antibacterial activity 1386.
epoxyenone macrolide antibiotics, deepoxidation 5788.
epoxyenone macrolide antibiotics, deepoxidation, products antibacterial activity 5789.
- Chemical oxygen demand**,
biodegradation assays, reviews 7822.
effects on wastewater treatment, industrial effluents, meat industry, anaerobic conditions, bioreactors 3196.
wastes, microorganisms, measuring techniques, enumeration, waste water, biochemical characteristics, reviews 4918.
wastewater treatment, industrial effluents, breweries 3201.
- Chemical pollution**,
biodegradation assays, aquatic microorganisms, rivers 2329.
biodegradation, use, genetic engineering microorganisms, books, conferences 3392.
biodegradation, use, genetic engineering microorganisms, ecological evaluation 3685.
monochlorobiphenyls, biphenyl, biodegradation, rivers 185.
toxicity, marine environment, estuaries, genetic engineering microorganisms release, role, biodegradation 3681.
toxicity testing, activated sludge respiration, bioassays 543.
- Chemicals**,
induction, haustoria, *Uredinales* 6221.
industries, production, use immobilized enzymes, yeasts, *Aspergillus niger* immobilized cells 6836.
production, catalysis, use, microorganisms, immobilized enzymes, reviews 6031.
+radiation pretreatment, crop residues, effects on enzymes hydrolysis 1044.
radioactive labelling, association, flux, mycorrhizas, methodology, reviews 833.
synthesis, bioelectrochemical cell, use, *Aspergillus niger*, glucose oxidase, xanthine oxidase, association, *Caldanomyces fumago*, chloride peroxidase 6076.
treatment, sewage sludge odors, deodorization 9247.
- Chemiluminescence**,
enzyme-linked immunosorbent assay, diagnosis, viruses infection 1562.
- Chemotautophy**,
hydrogen bacteria, screening, autoradiography 3261.
- Chemostats**,
culture, *Schizosaccharomyces pombe* 7636.
feedback inhibition, ethanol, *Saccharomyces cerevisiae* 6938.
growth kinetics, *Alcaligenes eutrophus* 9302.
lysine production, respiration (cyanide insensitive), *Brevibacterium flavum* 7669.
microorganisms, mathematical models, growth curves 9269.
plasmids stability, regulation, feedback inhibition, methylotrophic bacteria 9303.
ribitol dehydrogenase biosynthesis, mutants, *Escherichia coli* 6821.
ribitol dehydrogenase, ribitol nutrient deficiency, *Escherichia coli* 3444.
Thiobacillus ferrooxidans, iron(II) oxidation, ferrous sulfate, kinetics 3000.
- Chemotactic factors**,
Streptococcus sanguis, purification, characterization 2556.
- Chemotactic methyltransferase**,
purification, kinetics, characterization, *Bacillus subtilis* 3488.
- Chemotaxis**,
Pseudomonas aeruginosa, *Vibrio cholerae*, distilleries, effluents, coastal waters 560.
Rhizobium meliloti, motility, soil 378.
- Chemotherapy**,
agents, effects on bacteria growth, Bacter test, cancer patients 3319.
infectious diseases, antibiotics antibacterial activity, antibiotic resistance 5099.
- Chenodeoxycholic acid**,
induction, 7 α -hydroxysteroid dehydrogenase, 7 β -hydroxysteroid dehydrogenase, purification, induction, *Clostridium absonum* 4305.
- Chenopodium amaranticolor**,
abscisic acid, tobacco mosaic virus infectivity 2044.
- Chenopodium amrosoides**,
plant extracts, antiviral activity, tobacco mosaic virus, sunn hemp mosaic virus, foliar applications, disease control 8140.
- Chenopodium quinoa**,
kalanchoe latent virus cytopathology 7174.
papaya ringspot virus, mutants, use, biological control, infection 8110.
- Cherry leaf roll virus**,
blackline disease etiology, *Juglans hindsi* 4530.
virus-like particles, localization, pollen, anthers, transmission (vertical), *Prunus avium*, *Betula pendula*, *Juglans regia* 7990.
- Chestnut blight**,
Endothia parasitica, hypovirulence, strains incompatibility, genetic analysis, biological control 368.

- etomlin**, effects on, rumen microorganisms, growth, fermentation 2315.
- flucanycin**, production, isolation, *Streptomyces albus*, characterization 6067.
- microscopy**, structure 6890.
- tick embryos**, cells growth optimization, fermenters, vaccines production, viruses 4077.
- toxicity testing**, α -toxin, *Clostridium perfringens* 8736.
- tyolk sac**, *Rickettsia prowazekii* DNA purification, deoxyribonuclease treatment 5033.
- tickens**, animal isolates, Mycoplasma, antibiotic sensitivity testing, dilution tests, antibiotic resistance 3087.
- animal wastes**, digestion (anaerobic), reactors, methanogenesis, mathematical models 8394.
- avian infectious bronchitis virus**, antibodies detection, hemagglutination inhibition, neutralization 3245.
- colibacillosis prevention**, intestinal microflora, antagonism, lactic acid bacteria 1064.
- crop**, *Lactobacillus* isolates, amylase biosynthesis 1815.
- eggs**, tissues, levels, aflatoxin B1, aflatoxin M1, feeds contamination 8727.
- embryo fibroblasts**, live combined vaccines production, Marek's disease virus, infectious bursitis virus, herpesvirus (turkey) 7486.
- enzyme-linked immunosorbent assay**, detection, *Pasteurella multocida*, antibodies 5074.
- enzyme-linked immunosorbent assay** use detection avian encephalomyelitis virus antibodies 5019.
- feces**, fermentation, fungi screening 3586.
- feeding behavior**, feeds contamination, mycotoxins 7898.
- feces**, aflatoxins contamination correlation zinc levels 4473.
- feeds**, contamination, *Salmonella* 7009.
- decontamination**, *Salmonella*, microwave radiation, steam, hot air 1066.
- feeds**, digestion (aerobic), effects on nutritive value, manure 6201.
- feeds**, molds food contamination, ingestion effects on body weight 7014.
- feeds**, mycoflora, aflatoxins biosynthesis, accumulation, storage conditions effects on 7094.
- feeds**, *Paeclomyces varioti*, nutritive value 7103.
- feeds**, *Saccharomyces cerevisiae* effects on growth 7874.
- feeds**, supplements, *Lactobacillus plantarum*, lysine biosynthesis, nutrient requirements, colonization, gastrointestinal tract 7010.
- food additives**, erythromycin, antibacterial activity, *Clostridium perfringens* 1065.
- food contamination**, *Pseudomonas*, volatiles production 5317.
- food**, cholera vaccination, antibody response, enzyme-linked immunosorbent assay, indirect hemagglutination 3343.
- hemorrhagic enteritis virus** antibodies detection, enzyme-linked immunosorbent assay methodology 9281.
- immunity**, infectivity, live vaccines, avian laryngotracheitis virus 3180.
- intestinal microflora**, biotin nutrient availability, oral administration, *Lactobacillus acidophilus* - antibiotics 2750.
- isolation**, *Escherichia coli*, antibiotic resistance, tetracycline, chloramphenicol, rifampicin, amoxicillin 3032.
- Lactobacillus** oral administration, inhibition coliforms, intestinal microflora, growth 2751.
- liver**, lipids levels, *Fusarium* vomitoxins contamination 2748.
- manure**, aflatoxin B1 levels, temperature, humidity effects on 6208.
- manure**, digestion (anaerobic), waste treatment, methanogenesis, immobilized cells 718.
- manure slurries**, methanogenesis 7306.
- Mycoplasma** animal isolates, mixed infection detection, growth inhibition test 2449.
- Mycoplasma gallisepticum** infection, diagnosis, agglutination, methodology 5078.
- Newcastle disease**, immunity, enzyme-linked immunosorbent assay detection 3244.
- nutritive value**, activated sludge, abattoirs, industrial effluents 7015.
- nutritive value**, feeding trials, single-cell protein, *Candida* 5361.
- proteins**, nutritive value, aflatoxins food contamination effects on 5352.
- vaccines**, serological tests, standardization 5036.
- rotavirus virus**, antigens, detection, agglutination, protein A 4991.
- seroepidemiology**, hemolysis, detection antibodies, man 4996.
- children**, dental caries, fluoridation 8431.
- dental caries**, fluoridation effects on epidemiology, British Isles 7555.
- dental caries** incidence, drinking water, fluoride levels 6728.
- dental caries prophylaxis**, fluoridation water treatment 7552.
- diarrhea isolates**, *Escherichia coli* identification, enterotoxins production association, hybridization analysis 1934.
- enzyme-linked immunosorbent assay**, diagnosis, respiratory syncytial virus infection 1564.
- rotavirus (human)** antigens detection, immunoassays solid-phase methods 4189.
- gastroenteritis**, rotavirus (human) incidence, enzyme-linked immunosorbent assay, Venezuela 4165.
- immunoassays** diagnosis adenovirus (human) infection, nasopharynx secretions, feces 3238.
- malignancy**, infection prophylaxis, laminar air flow, nosocomial environments 576.
- parainfluenza virus** detection, indirect fluorescent antibody test methodology 1565.
- tile**, *Salmonella typhi*, isolation, swabs, sewage effluents 6717.
- Solanum tuberosum**, *Erwinia carotovora* soft rot, tubers, comparison, stems 2015.
- villo indescens virus**, proteolytic enzymes activity 1737.
- zina**, *People's Rep.*, *Arachis hypogaea*, cucumber mosaic virus detection 6229.
- Cucumis**, *Phytophthora drechsleri* blight 7170.
- industries**, immobilized cells, immobilized enzymes, reviews 77.
- rotavirus**, antigenic characteristics, identification, Gramineae 6796.
- metabolism**, biotechnology 6167.
- ironomus salinarum**, population density, lakes, *Bacillus thuringiensis*, biological control, efficacy 6084.
- itlin**, assays, *Uromyces phaseoli*, rust, histopathology, *Phaeolus vulgaris* 1967.
- biosynthesis**, fungi, wood decay, polycyclic effects on 3647.
- biosynthesis**, industrial applications, reviews, microorganisms 8619.
- Chitin, (continued)**
hydrolysis, chemical modification, *Candida guilliermondii*, *Saccharomyces cerevisiae* 6942.
- levels**, *Hebeloma cylindrosporum*, ectomycorrhizas, *Pinus pinaster* 3949.
- membranes**, biodegradation, bacteria 1036.
- metabolism**, *Mucor miehei*, *Streptomyces antibioticus*, avermectin, inhibition 6578.
- reviews**, biotechnology, fungi 5201.
- Chitin deacetylase**, role, chitosan biosynthesis, kinetics, *Mucor rouxii* 3435.
- Chitin synthase**, purification, *Coprinus cinereus* 4308.
- Chitin synthetase**, role, chitosan biosynthesis, kinetics, *Mucor rouxii* 3435.
- Chitinase**, assays, relationship population levels, fungi, soil 2937.
- biosynthesis**, *Trichoderma viride* 920.
- Chitinoic bacteria**, synergism, pathogenesis + *Bacillus thuringiensis* var. *entomocidus*, *Spodoptera littoralis*, biological control 131.
- Chitosan**, biosynthesis, chitin synthetase, chitin deacetylase role, kinetics, *Mucor rouxii* 3435.
- biosynthesis**, industrial applications, reviews, microorganisms 8619.
- production**, fermentation, *Asidia corulea* 8889.
- Chlamydia**, antigens, detection, enzyme-linked immunosorbent assay 5068.
- antigens**, purification, ion-exchange chromatography 728.
- immunoglobulin G**, immunoglobulin M, detection, enzyme-linked immunosorbent assay 760.
- infection**, agglutination immunodiagnosis, sheep, goats 2504.
- Chlamydia psittaci**, infection, immunodiagnosis, enzyme-linked immunosorbent assay, antibodies detection 413.
- media (transport)**, clinical isolates 4206.
- Chlamydia trachomatis**, antibacterial activity, ciprofloxacin, norfloxacin, piperimic acid, cinoxacin, nalidixic acid 3119.
- antibacterial activity** comparison, ofloxacin, tetracycline 9199.
- antibacterial activity**, rifampin 8360.
- antibodies**, immunofluorescence, respiratory tract diseases, man 4196.
- cell culture**, monolayers, McCoy cells, recovery methodology 1602.
- diagnosis**, hybridization analysis, DNA, methodology 9313.
- isolation**, use, cycloheximide treatment McCoy cells + periodic acid-Schiff stain 3294.
- immunoglobulin G** specificity, detection, immunoperoxidase test 2476.
- inclusions**, cells, detection, monoclonal antibodies, labelling methodology 3337.
- inclusions** detection, monoclonal antibodies immunofluorescence sensitivity, man 2455.
- infection**, immunodiagnosis, enzyme-linked immunosorbent assay, antibodies detection 4183.
- infectivity**, McCoy cells, trifluoperazine, inhibition 450.
- isolation**, lubricants, effects on, medical instruments, genital tract 697.
- isolation methodology** 748.
- isolation**, swabs, media (transport), diagnosis, sexually-transmitted diseases, man 5037.
- media (culture)** + temperature, effects on storage 5079.
- membrane proteins**, detection, immunoassays 753.
- miokarycin** antibacterial activity 8368.
- use**, McCoy cells, isolation, cell culture, methodology 790.
- Chlamydoclin**, + analogs, conformation, N.M.R., C.D. 2305.
- synthesis** 1838.
- Chlamydozoa**, *Fusarium oxysporum* f.sp. *cucurmenum*, spore germination, bacteria, fluorescence, cytotoxicity, effects on, soil 8227.
- role**, survival, pathogenesis, *Fusarium*, plant diseases, reviews 7189.
- Chloramine-T**, comparison, sodium borate, media (transport), *Mycobacterium bovis* 665.
- Chloramines**, disinfection, pH effects on 9246.
- Chloramphenicol**, \pm ampicillin, antibiotic synergism, antibacterial activity, *Pseudomonas aeruginosa* 8349.
- antibacterial activity**, *Streptococcus pneumoniae* 9153.
- antibacterial activity**, stimulation, secretions, pancreas, duodenum, man 9088.
- antibiotic** antagonism, β -lactam antibiotics, antibacterial activity, *Klebsiella pneumoniae* 4806.
- antibiotic resistance**, animal isolates, mastitis, *Streptococcus agalactiae*, *Staphylococcus aureus*, *Streptococcus* 9083.
- antibiotic resistance**, antibiotic sensitivity testing, *Haemophilus influenzae*, clinical isolates, incidence, Spain 6420.
- antibiotic resistance**, association, chloramphenicol acetyltransferase, *Escherichia coli* 3997.
- antibiotic resistance**, bacteria, long-term effects 7323.
- antibiotic resistance**, bacteria, reviews 9052.
- antibiotic resistance**, clinical isolates, *Salmonella typhi* 9080.
- antibiotic resistance**, *Escherichia coli*, isolation, chickens 3032.
- antibiotic resistance**, R factors characterization, clinical isolates, *Staphylococcus aureus* 9178.
- antibiotic resistance**, R factors transfer, *Staphylococcus aureus* 9044.
- antibiotic resistance**, *Salmonella typhi*, mediation, plasmids 7322.
- antibiotic resistance**, *Staphylococcus aureus*, relationship protein A biosynthesis 9054.
- antibiotic resistance**, *Streptococcus pneumoniae*, clinical isolates, USA, Colorado 436.
- antibiotic sensitivity testing**, *Branhamella catarrhalis* 9163.
- antibiotic sensitivity testing**, *Escherichia coli* 7440.
- antibiotic sensitivity testing**, *Haemophilus influenzae*, MS-2 system 498.
- antibiotic sensitivity testing**, *Streptococcus faecalis* 4808.
- bacterial activity**, *Salmonella typhi*, *Salmonella enteritidis* 4853.
- biosynthesis**, nitrate, ammonium effects on, *Streptomyces venezuelae* 8355.
- biosynthesis**, nitrogen sources metabolism, regulation, *Streptomyces venezuelae* 4854.
- Clostridium perfringens** group sensitivity testing 3085.
- containing liposomes**, phagocytosis, antibacterial activity, *Escherichia coli*

Chloramphenicol, (continued)

infected macrophages 513.
infection, enzyme-linked immunosorbent assay, methodology 3110.
drug resistance, clinical isolates, *Haemophilus influenzae*, *Haemophilus parainfluenzae* 3035.
drug sensitivity testing, *Aeromonas salmonicida* 8303.
+EDTA-tromethamine, antibacterial activity, gram-positive bacteria 4816.
effects on *Bacillus subtilis*, sporulation, stringent response 2242.
effects on *Phytophthora infestans* developmental stages 1401.
pharmacology, reviews 5780.
production, methyl- α -glucoside effects on, *Streptomyces venezuelae* 4053.
resistance, *Phytophthora infestans* 7320.
resistance, *Salmonella typhi* 429.
+flamapin, antibiotic synergism, antibacterial activity, *Haemophilus influenzae* type b 9166.
titration 5779.

Chloramphenicol acetyltransferase,

Escherichia coli, association, antibiotic resistance, chloramphenicol 3997.

Chlorella,

cell culture, viruses infection, plaque assay development 592.

Chlorella vulgaris,

+ *Acinetobacter calcoaceticus*, biodegradation, octane 2191.

Chlorhexidine,

antibacterial activity, surfactants effects on 9261.
disinfection 1511.
microenvironments levels, relationship, *Streptococcus mutans* growth inhibition 1352.
mouthwashes, dental plaque, disease control, surgery, man 2423.
mouthwashes, disease control, dental plaque, man 2424.
resistance, gram-negative bacilli 9042.

Chlorhexidine diacetate,

sterilization solutions, *Bacillus subtilis* var. *niger* spores 4784.

Chlorhexidine digluconate,

biodegradation, acclimatization, activated sludge 4112.

+EDTA+tris, antibacterial activity, gram-negative bacteria, association

gentomycinuric tract infection, man 6466.

Chloric acid,

+nitrate, effects on coliforms growth, cheese 7842.

Chloride peroxidase,

Caldariomyces fumago, association, *Aspergillus niger*, glucose oxidase, xanthine oxidase, use, bioelectrochemical cell, chemicals synthesis 6076.
substrates identification, dimethyl sulfoxide, *Caldariomyces fumago* 904.

Chlorinated hydrocarbons,

detoxification, microorganisms, genetic engineering 4089.

Chlorination,

aromatic hydrocarbons, biodegradation, TOL plasmid, *Pseudomonas*, *Pseudomonas*

capacia 5313.

drinking water, *Legionella* isolation 9256.

effects on antibiotic resistance, sewage isolates 6437.

fecal coliforms, counting methods, media (enrichment), wastewater treatment

effluents 1470.

indicator species, *Pseudomonas aeruginosa*, *Streptococcus*, swimming pools 567.

swimming pools, association, bacteria, levels, Australia 3220.

water treatment, reduction, trihalomethanes, association, viruses, bacteria,

levels 3206.

Chlorine,

derivatives, disinfection 1506.

disinfectants, bacteria, viruses, wastewater treatment, residues 4938.

disinfection, resistance, *Escherichia coli* 9041.

disinfection, spores, *Bacillus*, clostridium, food industry 6413.

disinfection, temperature effects on, parvovirus 6484.

disinfection, waste water, ponds, fecal coliforms 6671.

inactivation, parvovirus H-1, characterization 475.

rotavirus (simian) SA11 inactivation 8324.

synergism, chlorine dioxide, ozone, peracetic acid, disinfection, sewage

effluents, poliovirus 1 6694.

Chlorine dioxide,

antibacterial activity, bacteria, food contamination, food processing, off

flavor, poultry 7020.

antibacterial activity, bacteria, models, in vitro 8721.

control, microorganisms contamination, cucumbers 8051.

rotavirus (simian) SA11 inactivation 8324.

synergism, chlorine, disinfection, sewage effluents, poliovirus 1 6694.

Chlorinequat chloride,

effects on *Bradyrhizobium japonicum*, nodulation, nitrogen fixation, Glycine max

8242.

β -Chloro-D-alanine,

containing dipeptides, peptide synthesis, antibacterial activity 4736.

6-Chloro-N-ethyl-1,3,5-triazine-2,4-diamine,

dechlorination, deamination, biodegradation, *Rhodococcus coralinus* 8691.

α -(2-Chloro-N-2,6-xyllylacetamido)- α -butyrolactone,

controlled-release granules, use, disease control, *Solanum tuberosum* late blight,

Phytophthora infestans 2887.

2-Chloro-1,3,5-triazine-4,6-diamine,

biodegradation, *Pseudomonas* 7834.

2-Chloro-6-(trichloromethyl) pyridine,

nitrification inhibitors, effects on ammonium levels, nitrifying bacteria, soil

7273.

effects on, *Methylosinus trichosporium*, methane, oxidation 2999.

nitrification inhibitors, biochemical oxygen demand assays, waste water 1476.

9-Chloro-9-(diethylaminophenyl)-10-phenylcarbazide,

media (selective), isolation, *Pseudomonas aeruginosa* 6783.

Chlorobenzene,

biodegradation, bacteria, isolation, metabolism, characterization 2718.

Chlorobenzoates,

biodegradation, *Aspergillus niger* 6170.

2-Chlorobenzoic acid,

utilization, *Pseudomonas* *capacia* 6954.

3-Chlorobenzoic acid,

biodegradation, plasmids, gene transfer, *Pseudomonas putida* 1008.

Chlorobutene,

culture methodology 4214.

Chlorobutene,

storage, nitrogen (liquid), anaerobic conditions 4215.

Chlorobutene,

Actinomyces hydroxylatus 5792.

4-Chlorobiphenyl,

biodegradation, *Acromobacter*, *Bacillus brevis* 5304.

Chlorobium limicola f.sp. thiosulfatophilum,

cell membranes, cytochrome b, reaction centers, purification, characterization

4253.

+Desulfobacter, mixed culture, calcium sulfate, sulfate, conversion sulfur 5693.

Chlorobium thiosulfatophilum,

hydrogen sulfide, carbon dioxide, nitrogen, oxidation, bioreactors, computer

applications, monitoring 3612.

sulfur production, sulfate by-products 3977.

3-Chlorocatechol,

inactivation kinetics, catechol 2,3-dioxygenase, *Pseudomonas putida* 3449.

12-Chlorodehydroabietic acid,

detoxification, industrial effluents, pulp mills, *Mortierella isabellina* 2706.

Chloroflexaceae,

culture methodology 4214.

Chloroform,

fumigation, biomass estimation, soil microorganisms, nitrogen cycle, carbon cycle

9224.

fumigation, effects on soil microorganisms, crop fields 5681.

industrial effluents, toxicity, methanogenic bacteria, digestion (anaerobic)

2376.

p-Chloromercuribenzoic acid,

sulphydryl groups inhibitors, effects on hemocellulase, hydrolysis,

hemocellulose, *Cephalosporium sacchari* 4354.

Chlorophenol,

biodegradation, bacteria communities 182.

biodegradation, bacteria, sewage sludge 2703.

1-(4-Chlorophenoxy)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,

antifungal activity, fungi, clinical isolates 4758.

1-(4-Chlorophenoxy)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,

antifungal activity, fungi, clinical isolates 4756.

Chlorophylla,

levels, *Phaseolus vulgaris*, association, *Uromyces phaseoli* rust 2775.

Chlorophyta,

marine environment, association, antibacterial activity, penicillinase

inhibition, effects on, *Staphylococcus aureus*, *Escherichia coli* 8305.

substrates, use, methanogenesis production, methanogenic bacteria 2184.

Chloropiridin,

dehalogenation, *Pseudomonas putida*, biodegradation 6159.

Chloroplasts,

differentiation, *Saccharum officinale*, *Xanthomonas albilineans* scald 253.

+ferredoxin+hydrogenase, immobilization, production, hydrogen, oxygen 5161.

ultrastructure, Abutilon, plant diseases, abutilon mosaic virus, seasonal

variations 4541.

ultrastructure, *Phaseolus vulgaris*, association, *Uromyces phaseoli* rust 2775.

Chlorosis,

Capiscum annuum, spot, *Xanthomonas campestris* pv. *vesicatoria* 4546.

Helianthus tuberosus, *Pseudomonas syringae* pv. *tagetis* infection 3849.

leaves, *Poa pratensis*, ethylene induction, leafspot 8797.

Lycopersicon esculentum, *Cladosporium fulvum* infection 5465.

Chlorothal,

effects on, development, mycorrhizas, *Pinus ponderosa*, *Pseudotsuga menziesii*

5592.

Chlorothal-II,

Rhizoctonia sensitivity 8106.

disease control, *Phytophthora infestans*, late blight, *Lycopersicon esculentum*

1206.

Chlorpromazine,

role, measles virus budding inhibition 471.

Chloroquinol,

antibacterial activity, stimulation, pancreas, duodenum, man 9088.

Chlortetracycline,

antibiotic resistance, aerobic bacteria, coliforms, animal isolates, relationship

feeds additives, pigs 6295.

antibiotic resistance, anaerobic bacteria, animal isolates, chlortetracycline

containing feeds, pigs 2197.

antibiotic resistance, fecal coliforms, Bolation, pigs 5711.

feeds, *Salmonella typhimurium* experimental infection, pigs, antibacterial

activity 4466.

+potassium sorbate, +tetrasodium ethylenediaminetetraacetate, fishery products

preservation, vacuum packaging 7885.

treatment, association, antibiotic resistance, coliforms, isolation, pigs 3033.

CHO cells,

enterotoxins detection methodology, *Salmonella* 1933.

Choccolate spot,

Botrytis fabae, *Vicia faba*, pectinolytic enzymes, phytotoxins, effects on

pathogenesis 3794.

Cholestane,

cholesterol oxidase, cholesterol conversion, nocardia rhodochrous 108.

Cholesterol,

conversion, cholestane, cholesterol oxidase, nocardia rhodochrous 108.

Cholesterol oxidase,

ion-exchange chromatography, *Streptomyces lavendulae* 4307.

nocardia rhodochrous, cholesterol conversion, cholestane 108.

Cholic acid,

biodegradation, *Pseudomonas*, anaerobic conditions 4427.

Choline,

effects on, *Propionibacterium shermanii*, *Propionibacterium*, cyanocobalamin,

biogenesis 146.

Choline oxidase,

Alcaligenes, U.V. radiation, photoreduction, flavosequinone formation 891.

Chondrilla juncea,

weed control, *Puccinia chondrillina* biological control, life cycle, USA,

Washington 6074.

weed control, *Puccinia chondrillina* biological control 6075.

Chondroitin sulfate,

bacteria biodegradation, media use detection 9293.

Chondrosterium purpureum,

spore germination, inhibition, integrated control, fungicides+*Trichoderma viride*,

silver-leaf disease, pruning wounds, *Prunus domestica* 5588.

Chorismate mutase,

activity, tryptophan activation, *Candida maltosa* 8580.

Choristoneura,

biological control, virulence, *Entomophthora egressa*, role double-stranded RNA

norlstoneura, (continued)

- viruses 8634.
pathogens exposure time effects on mortality, recovery, *Bacillus thuringiensis* 3555.
norlstoneura fumiferana,
biological control, *Bacillus thuringiensis*, endotoxins induction anorexia 3570.
biological control, *Bacillus thuringiensis*, foliar applications 2652.
biological control, *Bacillus thuringiensis*, forests, *Abies balsamea* 7778.
biological control, *Bacillus thuringiensis* formulations, xylene, sorbitol 2667.
biological control, *Bacillus thuringiensis* spores, sunlight inactivation, protection 119.
biological control, *Bacillus thuringiensis* subsp. *kurstaki*, field trials, USA, Michigan 6078.
biological control, *Bacillus thuringiensis*, USA, Wisconsin 139.
biological control, instars susceptibility, *Bacillus thuringiensis* 3554.
biological control, pathogens, foliar applications, efficacy, persistence, *Bacillus thuringiensis* 3556.
cell lines, selection, resistance, *Bacillus thuringiensis*, endotoxins 6895.
plasma membranes, glycoproteins receptors, binding, δ -endotoxin, cytotoxicity, *Bacillus thuringiensis* subsp. *kurstaki* 5387.
notmatellaceae,
culture methodology 4214.
storage, nitrogen (liquid), anaerobic conditions 4215.
notmatium vinosum,
bacteriochlorophyll a preparation 2670.
notmatium warmingli,
iron-sulfur proteins, purification, characterization 4262.
notmatofuscus,
enterococci B, enterotoxin C1, *Staphylococcus aureus*, characterization 1086.
isolation, capsid protein, food-and-mouth disease virus, methodology 656.
purification, characterization, neurotoxins multiple forms, *Clostridium tetani* 7908.
notmatography,
adsorption use, purification, characterization, flavodoxin, Azotobacter vineiandii 4260.
antibiotics, books 6795.
biodegradation assays, reviews 7822.
dyes ligands, purification, characterization, phospho-2-keto-3-deoxy-gluconate nodulation, *Zymomonas mobilis* 4294.
extracellular enzymes purification, molecular weight, microorganisms 5159.
isolation, purification, polygalacturonase isoenzymes, pectin lyase, *Penicillium oxalicum* 7720.
membrane filtration, measuring techniques, phages, concentration, water, methodology 5850.
methodology, use, detection, aflatoxins food contamination, *Aspergillus parasiticus*, *Zea mays*, *Phaseolus* 7088.
plasmids, DNA, purification, precipitation, methodology 5917.
purification, characterization, hydramide, 2-oxoglutarate dioxygenase, *Neurospora crassa* 5122.
purification, toxins, *Corynebacterium diphtheriae* 3750.
pyrolysis, *Enterobacteriaceae* identification 9324.
RNA polymerase III, ionic strength effects on, yeasts 7704.
use, pyruvate decarboxylase catalysis, pyruvic acid, acetaldehyde, acetoin by-products, *Saccharomyces cerevisiae* 7721.
notmatium (II),
antifungal activity, *Fusarium oxysporum* f.sp. *lycopersici*, *Cunninghamella echinulata* 8316.
soil nitrification, effects on nitrifying bacteria 9027.
notmatium,
industrial wastes, acute toxicity, microorganisms, wastewater treatment 9229.
nitrification inhibitory, mathematical models 2358.
notmatium (VI),
antifungal activity, *Fusarium oxysporum* f.sp. *lycopersici*, *Cunninghamella echinulata* 8316.
soil nitrification, effects on nitrifying bacteria 9027.
notmatobacterium lividum,
nutrient uptake, acephate, effects on 6460.
notmatobacterium violaceum,
arphenamine A synthesis 3175.
 β -cyanolanine synthase, purification, characterization 6044.
notmatome number,
association, ethanol, production, *Pachysolen tannophilus* 147.
notmatome 6,
genes at, mapping, *Saccharomyces cerevisiae* 6788.
notmatomes,
bacteria, genetics, computer programs 5069.
DNA, separation methodology, yeasts 9335.
notmatone bee paralysis virus,
antiserum production 5891.
notmatocarpus lutescens,
leavespot, *Escherichium rostratum*, foliar applications, micronutrients, fungicides, effects on 3910.
notmatanthemum,
crown gall, biological control, *Agrobacterium radiobacter*, reviews 333.
white rust, epidemiology, *Puccinia horiana*, Australia 2024.
notmatanthemum morifolium,
growth stimulation, inoculation, *Glomus fasciculatus* 1269.
Phytophthora cryptogaea infection susceptibility, salinity effects on 7181.
Pseudomonas cichorii inoculation, spot pathogenesis 4537.
notmatanthemum stunt viroid detection, South Africa 6261.
notmatanthemum stunt viroid,
detection, *Chrysanthemum* , South Africa 6261.
notmatomyxa woroninii,
bud rust, *Picea*, pathogenesis 5580.
notmatosporium,
soil microorganisms, Spain 6336.
notmatosporium farincola,
spoilage, coconut 5344.
notmatosporium pannorum,
growth conditions, meat, food contamination 6193.

notmatosin,

- immobilized enzymes, mucor, milk curdling 205.
thermal stability, *Mucor miehei* 79.
notmatotrypin,
immobilization 6037.
inhibitors, production, *Streptomyces* 7658.
inhibitors, *Proteus vulgaris*, purification, characterization 6810.
notmatotrypin,
+catalase, immobilization methodology 4304.
immobilized enzymes, matrix conformation effects on activity 1769.
notmatellidae,
disease transmission, plant viruses 7130.
disease transmission, viruses, mycoplasma-like organisms, *Oryza sativa* 7156.
vectors, disease transmission, mycoplasma-like organisms, plant viruses 7157.
notmat,
lettuce necrotic yellows virus infection, etiology, symptoms, epidemiology 4502.
notmat arietinum,
Ascochyta blight, conferences, books 4247.
Ascochyta blight, disease control, fungicides 3883.
Ascochyta blight, Ethiopia 3790.
Ascochyta blight, India 3792.
Ascochyta blight, reviews 3785.
Ascochyta blight, Spain 3791.
Ascochyta blight blight, disease control, seed-borne diseases, reviews 3905.
Ascochyta blight blight disease resistance screening projects 3863.
Ascochyta blight blight, epidemiology 3786.
Ascochyta blight blight, Pakistan, reviews 3789.
Ascochyta blight blight, pathogenicity, races 3788.
Ascochyta blight blight, screening projects 3787.
disease resistance inheritance, *Fusarium oxysporum* f.sp. *clavipes* wilt 298.
disease resistance, plant breeding, blight, *Ascochyta blight* 3864.
disease resistance, plant breeding, blight, *Ascochyta blight* 3865.
disease resistance, wilt, *Fusarium oxysporum* f.sp. *clavipes*, gene regulation 3867.
germplasm screening, disease resistance, blight, *Ascochyta blight* 8093.
infection incidence, *Rhizoctonia bataticola* inoculum, mycelia, sclerotia, soil 1976.
inoculation, nitrogen fixation, *Rhizobium* 8999.
nitrogen fixation, nodulation, *Rhizobium*, zinc effects on 4650.
nodulation, soil amendment, calcium oxide, calcium sulfate effects on, *Rhizobium* 9015.
Rhizobium nodulation 3960.
Rhizoctonia bataticola infection, phenols levels 1975.
Rhizoctonia bataticola infection screening 1980.
rhizosphere, *Rhizobium* interaction 4669.
seed rot, damping-off, *Pythium ultimum*, seed treatments, biological control, *Penicillium oxalicum* 8114.
seedlings, disease transmission, *Ascochyta blight*, disease control, benomyl, *Rhizoglyphus* 1969.
stem rot, wilt, *Sclerotinia sclerotiorum*, planting timing effects on 5412.
susceptibility, factors affecting, *Ascochyta blight* 1974.
symbiosis interaction, *Rhizobium* 4648.
wilt, epidemiology, *Verticillium albo-atrum*, Pakistan 1117.
notmatography,
soft rot, biodegradation, *Phialophora hoffmannii*, wood 1245.
notmatoxacin,
antibacterial activity 6455.
antibacterial activity, *Chlamydia trachomatis* 3119.
antibacterial activity, *Pseudomonas aeruginosa* 7377.
comparison, norfloxacin, antibacterial activity, *Enterobacteriaceae* 7373.
cross-resistance, *Pseudomonas aeruginosa*, *Escherichia coli* 6421.
treatment, urinary tract infection, bacteria, man 2212.
notmatofloxacin,
antibacterial activity 4744.
antibacterial activity 4745.
antibacterial activity 6455.
antibacterial activity, *Bacteroides fragilis*, *Clostridium*, pH, inoculation, effects on 4733.
antibacterial activity, *Chlamydia trachomatis* 3119.
antibacterial activity, comparison, norfloxacin, nalidixic acid 6465.
antibacterial activity, *Enterobacteriaceae* 4734.
antibacterial activity, *Enterobacteriaceae*, *Pseudomonas aeruginosa* 4746.
antibacterial activity, gram-negative bacteria, gram-positive bacteria 6467.
antibacterial activity, gram-negative bacteria, gram-positive bacteria 9099.
antibacterial activity, *Legionella* 5726.
antibacterial activity, *Legionella* 5729.
antibacterial activity, *Mycobacterium* 9085.
antibiotic sensitivity testing, anaerobic bacteria, aerobic bacteria 4730.
cross-resistance, *Pseudomonas aeruginosa*, *Escherichia coli* 6421.
notmat-platinum diamminodichloride,
antiviral activity, vaccinia virus, adenovirus (human) 5, vesicular stomatitis virus 8124.
inhibition, β -lactamase, *Bacillus cereus* 1754.
notmat incanus subsp. incanus,
ectomycorrhizas, *Tuber melanosporum*, roots, growth 3940.
notmat vulgaris,
seed-borne diseases, transmission (seed), *Didymella bryoniae* 8036.
notmatric acid,
effects on monophenol monooxygenase activity, browning, *Agaricus bisporus*, spoilage 3705.
effects on *Pleurotus ostreatus* penicillin acylase biosynthesis 2582.
production, U.V. radiation mutagenesis, *Aspergillus niger* 1731.
production, *Aspergillus niger* mutants, liquid culture 1708.
production, *Candida guilliermondii* 3416.
production, carbon sources, whey, *Phoenix dactylifera* seeds, *Candida lipolytica* 873.
production, cellulose conversion, models 3432.
production, fermentation, *Aspergillus niger* 6813.
production, fermentation, *Candida lipolytica* 5962.
production, immobilized cells, *Saccharomycopsis lipolytica* 2554.
production, liquid culture, *Aspergillus niger* 6814.
production, molasses fermentation, nutrient requirements, *Aspergillus niger* 8514.
notmatrinin,
diacetoxyscirpenol, feeds contamination, feeding behavior, reviews 7898.
food contamination, man, animals, screening methodology, chickens 7079.
identification, *Penicillium* food contamination cheese 7080.
like compounds, *Fusarium avenaceum* 5373.

Clindamycin, (continued)

antibiotic sensitivity testing, *Bacteroides nodosus* 3056.
antibiotic synergism, gentamicin, *Bacteroides melanogenicus*, *Bacteroides fragilis* 3118.
+ceftazidime, antibacterial activity 6515.
Clostridium perfringens drug sensitivity testing 3085.
effects on β -lactamase despression, gram-negative bacteria 515.
effects on *Staphylococcus*, fibronectin interactions, leukocytes (polymorphonuclear) phagocytosis 514.
inhibition, *Staphylococcus aureus* toxic shock syndrome exotoxins biosynthesis 7116.
leukocytes (polymorphonuclear) penetration, antibacterial activity, man 492.

Clinical microbiology

antibiotic sensitivity testing 488.
antibiotic sensitivity testing, agar dilution test 7399.
bacteria analysis, information systems, computer applications 6770.
bacteriology, computer programs 2474.
conferences 7841.
gas chromatography, diagnosis, infection 746.
identification, *Candida*, clinical isolates 808.
immobilized enzymes 88.
immunoassays, reviews 585.
laboratories, Norway, antibiotic sensitivity testing quality control 4040.
microorganisms, identification, methodology, reviews 3232.
quality control 1371.
urine, culture, tubes, samples volume, preservatives, bactericidal activity 708.
use enzymes assays, microorganisms 46.

Citrocybe subulidensis

fluids biosynthesis 527.

Cloacin

excretion, *Escherichia coli*, glucose fermentation effects on 2688.

Vitis vinifera, yield, leaf-roll, genetic variance, effects on 8859.

Cloning,
antibiotic resistance, ribostamycin, kanamycin, novobiocin, destomycin, racomycin, genes, *Streptomyces* 1314.
antigens, gene expression, neutralization, vaccines production, herpes simplex virus 6610.
antigens genes, vaccines production, genetic engineering, viruses 5807.
Bacillus anthracis, toxins, protection antigens, genes 1083.

DNA sequence, Glycine soja, effects on root hairs, effects on nodulation, *Agrobacterium japonicum*, *Pseudomonas putida* 6365.
gene expression, β -interferon, *Escherichia coli*, antiviral activity, characterization, man 2228.

genes, β -D-galactosidase production, *Streptomyces* 4039.
genes, antigens, vaccines production, rotavirus 6643.
genes, exo-1,4- α -D-glucosidase, *Aspergillus awamori*, cellulase, *Trichoderma reesei* 3498.
genes, xylose isomerase, xylulokinase, *Escherichia coli*, use, ethanol, fermentation 983.

hemagglutinins, production, vaccines, influenza virus 6598.
isoleucine-valine operon, gene regulation, biosynthesis, 2,3-butanedione, 2,3-pentanedione, flavor compounds, beer, *Saccharomyces cerevisiae* 7797.
Lactobacillus delbrueckii, malic acid, lactic acid, genes, *Escherichia coli*, *Saccharomyces cerevisiae*, role, wine, fermentation 2581.

lactose genes, role, *Streptococcus lactis*, fermentation, milk 2739.
neuraminidase, production, vaccines, influenza virus 6598.
yeasts cytochrome c genes, *Escherichia coli* transformation 819.

Cloning vectors

antibiotics production, *Streptomyces* 4845.
books 842.
DNA recombination, enzymes biotechnology 4297.
Escherichia coli, vaccines production, capsid protein expression, poliovirus 1 6605.
gene expression, mice α -amylase biosynthesis, *Saccharomyces cerevisiae* 5169.

hemagglutinins expression, immunogenicity, antigenicity, vaccines production, influenza virus 6636.
hepatitis B surface antigen gene expression, yeasts, hepatitis B virus vaccines production 6631.

hepatitis B surface antigen, vaccines, hepatitis B virus 6597.
linear plasmids, construction, yeasts 818.
methodology, *Saccharomyces cerevisiae*, genetic engineering, production, drugs 7775.

phase A 627.
phase M13 626.
plasmids, gene expression 3403.
plasmids, phages, DNA integration methodology 628.

preparation, fermenters, phages, *Rhizobium meliloti* 4997.
transformation, *Escherichia coli*, tetrahydrofolate dehydrogenase, purification, plasmid pTP 6-10 99.
transformation, lactose lac gene, *Streptococcus lactis* 6991.

transposon γ containing, transposition 758.
use papilloma virus (bovine), mammalian cells transfection 629.

Clostridium

antibacterial activity, bicycliclomylin 3164.
antibiotic RU 28965, antibacterial activity 4878.
antimicrobial agents antibacterial activity, agar dilution test, animal isolates 3050.
biosynthesis, corrinoids, tetrapyrroles, cyanocobalamin like compounds 7779.

butanol production, glucose fermentation 5236.
carbohydrates fermentation, solvents production, wood, pulp mills 5259.
cellulase, production, activity, reviews 100.
cellulose fermentation 5111.
cellulose fermentation, production, ethanol, n-butanol, acetic acid, n-butyric acid 6150.

drug sensitivity testing, inoculum preparations 1334.
fermentation, thermodynamics, mathematical models 3549.
gas chromatography, detection, hippuric acid, fumaric acid, conversion, succinic acid, methodology 794.
genetic engineering, gene transfer, fermentation, reviews 3593.
growth, cyclohexane reduction 1881.
 β -nitroacrylate reductase, purification, characterization, E.S.R. 3448.
+ *Pasteurella haemolytica*, vaccines, sheep, efficacy, experimental infection, gnotobiotics (specific pathogen free) 7488.
pH, inoculation, effects on, ciprofloxacin, antibacterial activity 4733.
phenylacetic acid biosynthesis 855.

Clostridium, (continued)

population levels, wetwood, *Populus euramericana* 8953.
rRNA, comparison methodology 2513.
soil, Trinidad, Tobago 6359.
spore germination, inactivation, acids, food, reviews 7026.
spores, resistance, chlorine, disinfection, food industry 6413.
tetrapyrroles biosynthesis 5210.

Clostridium abscessum

7 α -hydroxysteroid dehydrogenase, 7 β -hydroxysteroid dehydrogenase, purification, characterization, induction, chenodeoxycholic acid, deoxycholic acid 4305.

Clostridium acetobutylicum

acetone butanol fermentation, inhibition levels 962.
acetone butanol production 142.
acetone, butanol, production, continuous culture 961.
acetone production, butanol production 5237.
anaerobic conditions, cell culture 5919.
batch culture, glucose effects on fermentation, glucose, acetone 3545.
batch culture, glucose fermentation, production, acetone, butanol 4383.
bioreactors, production, butanol, acetone 5244.
butanol fermentation, hydrogenase activity, carbon monoxide inhibition 8646.
butanol production, effects on membrane fluidity, lipid composition 1847.
cellulose fermentation 5111.

enzymes levels, biosynthesis, acetic acid, butyric acid, acetone, butanol 859.
enzymes metabolism, production, butyric acid, acetic acid 5113.
fermentation, production, acetone, butanol 140.
fermentation, wood hydrolysates, 2,3-butanediol, butanol, production 5220.

immobilized cells, solvents production, reviews 3575.
methanol production, fermenters, carbon dioxide utilization 3558.
polysaccharides, extracellular polymers, antitumor activity, sarcoma, mice 3540.
production, acetone, butanol, ethanol, mathematical models 976.
production, butanol, acetone, crop residues fermentation 7832.
sporulation, relationship, production, acetone, butanol, ethanol 7784.
whey conversion, production, acetone, butanol 4381.
whey fermentation, production, butanol, acetone 3546.

Clostridium acidilurci

formyltetrahydrofolate synthetase, antigenic characteristics, cross-reactivity, structure, tetrahydrofolate synthase, yeasts 8590.

Clostridium botulinum

botulism, food poisoning, seafood 4486.
growth, inhibition, sodium nitrite, potassium sorbate, lactic acid bacteria, starter cultures, packaging, luncheon meat 7023.
growth, pork, slurries, nisin, effects on 1944.
growth, toxins production, inhibition, sodium nitrite, + potassium sorbate, + sodium acid pyrophosphate, frankfurters 7027.
hemagglutinins, purification, characterization 2551.
neurotoxins, multiple forms, purification, characterization, antigenicity, comparison 6213.

neurotoxins, purification, characterization, amino acid composition 7909.
spore germination, pH, salinity effects on 1899.
spores, radiation effects on 4468.
toxins biosynthesis, growth rate 1951.

toxins formation, inhibition, fumaric acid esters, canned food, bacon 7034.
toxins, inhibition, iron ion, nitric oxide, carbon monoxide, pork, minced meat 7035.

toxins production, bacon contamination, radiation effects on 7039.
toxins, vegetables, canned food 3719.
vegetative cells, nitrite effects on iron-sulfur centers 6203.

Clostridium botulinum type E

toxins production, steam pasteurization, freezing, seafood, *Crassostrea virginica* 5394.

Clostridium butyricum

anaerobic conditions, cell culture 5919.
immobilized cells, hydrogen production, molasses conversion 3577.
immobilized cells, methane, production, wastewater treatment 1468.
immobilized cells, solvents production, reviews 3575.
inoculum, solvents, production, methodology 664.
polysaccharides, extracellular polymers, antitumor activity, sarcoma, mice 3540.
pulp mills, industrial effluents, digestion (anaerobic) 3204.

Clostridium cochlærium

glucose fermentation, 1-butanol production 8648.

Clostridium difficile

antibacterial activity, ciprofloxacin 4744.
antiser, adsorption, bioassays, detection, toxins 5382.
colitis outbreaks, hospitals, biotyping methodology, man 1641.
contamination, nosocomial environments 2412.
detection, feces, fluorescent antibody test, methodology 2510.
detection methodology, diarrhea, man 5921.
identification, API test, methodology 7609.
identification, toxins, detection, media (isolation) 229.
media (enrichment), isolation, feces 8469.
plasmids, correlation, antibiotic sensitivity testing, toxigenicity 1372.
recovery, surfaces, media (culture) 1599.
spores, feces, media (isolation), sodium taurocholate 688.
toxins antibodies, detection, enzyme-linked immunosorbent assay 230.
toxins, detection, feces, enzyme immunoassay 6216.
toxins detection, McCoy cells monolayers use 4478.
toxins, physicochemical properties, biological properties 7111.
toxins, purification, production 4484.

Clostridium histolyticum

collagenase, inhibition, phosphonic amides, phosphonic amides 25.
proteolytic enzymes role, hepatocytes release, rats liver 2573.

Clostridium kluyveri

acetyl-CoA acetyltransferase, 3-hydroxybutyryl-CoA dehydrogenase, purification, ion-exchange chromatography 8588.

Clostridium paprosolvens

biodegradation, pulp mills, effluents 1467.

Clostridium paraceticum

aldosterone, 18-hydroxycorticosterone, conversion, derivatives 5197.
recombinants screening, α -N-acetylgalactosaminidase detection, color, agar 1755.

Clostridium pasteurianum

formate dehydrogenase, purification, characterization 6859.
hydrogenase, + chloroplasts + ferredoxin, immobilization, production, hydrogen, oxygen 5161.
hydrogenase, purification, characterization 6839.

- Clostridium pasteurianum**, (continued)
hydrogenase, purification, characterization 7731.
nitrogenase, kinetics 19.
- Clostridium pectinofermentans**,
pectinolytic enzymes, activity, temperature, pH effects on 7737.
pectinolytic enzymes characterization 4348.
- Clostridium perfringens**,
antibacterial activity, cepipamide, apalocin 3101:
antibacterial activity, erythromycin, food additives, chickens 1065.
antibiotic resistance, tetracycline, relationship, bacteriocinogeny 4707.
drug sensitivity testing 3085.
enterotoxins, antisera preparation methodology 1959.
hypochlorous acid, chlorine dioxide, antibacterial activity, models, *In vitro* 5721.
indicator species, pollution monitoring, water quality, rivers 5855.
metronidazole bioassays, agar diffusion test 7365.
spores, spatial distribution, sediments, indicator species, sewage, sediments, lakes 2388.
sporulation, media (culture) 6757.
temperature, effects on, growth, beef 7029.
tetracycline, antibiotic resistance, gene transfer, characterization 3013.
 ϵ -toxin, toxicity testing, chick embryos 8736.
toxins biosynthesis, growth rate 1951.
- Clostridium saccharolyticum**,
ethanol production, wood hydrolysates, hydrogen fluoride pretreatment 5270.
pyruvic acid deficient mutant, ethanol production 152.
Zymomonas anaerobica, mixed culture, ethanol production, fermentation, cellobiose, glucose, xylose, mixtures 8661.
- Clostridium saccharoperbutylacetonicum**,
cell walls, peptidoglycans, *Bacillus subtilis*, lytic enzymes, enzymatic activity 5994.
polysaccharides, extracellular polymers, antitumor activity, sarcoma, mice 3540.
- Clostridium sporiforme**,
enterotoxins, purification, characterization, toxicity testing 4481.
- Clostridium sporogenes**,
ATP biosynthesis, enolic acid reduction 1842.
heat resistance, heat shock 7341.
spores, media (culture) 4207.
spores, yolk, agar, media (culture), enumeration, methodology 674.
survival, oil samples 9040.
- Clostridium stercorarium**,
cellulase characterization, cellulose hydrolysis 1738.
- Clostridium tetani**,
antibodies, detection, radioimmunoassay 1610.
antibodies, enzyme-linked immunosorbent assay methodology, man 780.
antitoxins, detection, enzyme-linked immunosorbent assay, neutralization, serum, man 4488.
antitoxins, hemagglutination, enzyme-linked immunosorbent assay, neutralization 5383.
neurotoxins multiple forms, purification, characterization, affinity chromatography, chromatofocusing 7908.
toxins, production, fermenters, association vaccines 2321.
toxins, purification, characterization 7907.
toxoids, adjuvants, Corynebacterium diphtheriae synthetic peptides, antigenicity, vaccines, mice 6656.
toxoids, conjugate, combined vaccines, synthetic peptides, Corynebacterium diphtheriae toxins, Streptococcus, hepatitis B surface antigen, antibody response, mice 9219.
toxoids, conjugation Neisseria meningitidis lipopolysaccharides, antibody response, vaccines, rabbits 1453.
toxoids immunogenicity, correlation purification methodology 4891.
- Clostridium tetanophorum**,
glucose fermentation, 1-butanol production 8648.
- Clostridium thermoacetium**,
acetic acid production, extraction 3414.
immobilized cells, acetic acid production 4270.
media (culture) 7602.
metabolism, carbon monoxide, carbon dioxide, methanol, fuels production 5312.
- Clostridium thermoautotrophicum**,
metabolism, carbon monoxide, carbon dioxide, methanol, fuels production 5312.
- Clostridium thermocellum**,
+Acetogenium kivui mixed culture, cellulose fermentation 8671.
cell surface organelles, cellulose binding, cellulolytic enzymes 5162.
cellulose fermentation, production, acetic acid, ethanol 5969.
cellulose hydrolysis, binding factors, cellulase 931.
fermentation, cellulose, association, nutrient concentrations, batch culture 4443.
fermentation, lignocelluloses, ethanol, production 4418.
lignocelluloses, proteins levels, Lowry assay 4424.
- Clostridium thermohydrosulfuricum**,
ethanol tolerance, factor affecting fermentation physiology 6135.
fermentation, ethanol, production 4418.
- Clostridium thermosaccharolyticum**,
continuous culture, fermentation, production, butanol, ethanol 3578.
fermentation, lignocelluloses, ethanol, production 4418.
- Clostridium tyrobutyricum**,
gas production, temperature effects on, cheese production 4462.
growth, cheese, nitrate+chloric acid effects on 7842.
- Clostrimazole**,
antibiotics, antifungal activity, relative inhibition factors measurements, dose-response effects 4017.
antifungal activity, inhibition, ergosterol biosynthesis, yeasts, dermatophyte fungi 8314.
drug sensitivity testing, Candida 5735.
susceptibility methodology, dermatophyte fungi 1336.
- Clover yellow vein virus**,
infection, Phaseolus vulgaris disease resistance, inoculation methodology effects on 8103.
infection, Phaseolus vulgaris, pathogenesis 6226.
infection, Trifolium, host range, field trials 1113.
infection, Trifolium hybridum germplasm 1112.
- Cubroot**,
Brassica oleracea var capitata, role, Plasmiodiophora brassicae, detection, irrigation systems sediments 3820.
Plasmiodiophora brassicae, antifungal agents, disease control, disease resistance,
- Cubroot**, (continued)
Brassica 8912.
Plasmiodiophora brassicae, disease resistance inheritance, Brassica napus, Brassica oleracea 300.
Plasmiodiophora brassicae, disease resistance, plant breeding, germplasm, Brassica campestris 8065.
Plasmiodiophora brassicae, inhibition, inoculation, rhizoplane microorganisms, bacteria, Raphanus sativus 8867.
Plasmiodiophora brassicae, solar radiation disease control, Brassica oleracea, Brassica rapa 292.
- Coagulants**,
bromelain, soybean milk curd, fermentation, Penicillium caseicola 7852.
- Coagulase**,
activity, identification methods, Staphylococcus 2493.
analysis, Staphylococcus aureus, mastitis isolates, cattle 231.
assays, identification, clinical isolates, Staphylococcus aureus 2502.
association, identification, biochemical characteristics, Staphylococcus, methodology 787.
biosynthesis, release, Staphylococcus aureus 4339.
thermal stability, Staphylococcus aureus 8565.
- Coagulase test**,
comparison agglutination, Staphylococcus aureus, differential diagnosis 7586.
detection, Staphylococcus 730.
- Coal**,
bioreactors, digestion (anaerobic), wastewater treatment 4109.
industrial effluents, wastewater treatment, aeration 4902.
methane oxidation, immobilized cells, Methylobacter rubra 1300.
mines, industrial wastes, soil amendment, land reclamation, revegetation, microorganisms, role 3955.
sulfur leaching, Thiobacillus 3976.
sulfur leaching, Thiobacillus ferrooxidans 3974.
sulfur removal, mathematical models, Thiobacillus ferrooxidans 5694.
wastewater treatment 5843.
- Coastal environments**,
dunes, sand, soil, sulfur oxidation, acidity, soil microorganisms 8968.
- Coastal waters**,
cellulolytic microorganisms, ecological distribution, relationship wood decay 8196.
Chamaelea gallina bioaccumulation, microbial pollution, coliforms 4128.
fungi, industrial effluents, lignin, pulp mills, waste water 1455.
marine pollution, Candida, indicator species 2399.
microbial pollution, coliforms, pollution monitoring, mathematical models 3210.
microbial pollution, enterovirus, indicator species, seasonal variations 6708.
microbial pollution, indicator species, sewage outfalls 6711.
pollution monitoring, microbial pollution, indicator species, bacteria 2400.
Pseudomonas aeruginosa, Vibrio cholerae, chemotaxis, distilleries, effluents 560.
Vibrio cholerae enumeration, seasonal variations, USA, California 6715.
- Coal protein**,
tobacco mosaic virus, mRNA characterization, Nicotiana tabacum mesophyll protoplasts 286.
- Coatings**,
silicone, glass containers, Penicillium cyclopium shake culture, effects on adherence 835.
- Cobalt**,
biomass levels, nutrient cycles, soil microorganisms 6347.
Klebsiella aerogenes capsules polymers binding, activated sludge 6679.
- Cobaltous sulfide**,
leaching, role, iron(II), Thiobacillus ferrooxidans 9030.
- Coccidiosis**,
antibodies detection methodology, complement fixation, immunodiffusion 1674.
antibodies, quantitation, complement fixation comparison immunodiffusion 815.
antigens extracts, disinfection, thimerosal, formaldehyde, clinical microbiology 810.
clinical isolates,
1-[4-chlorophenoxy]-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,
1-[4-chlorophenoxy]-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,
antifungal activity 4756.
cyclosporin A antifungal activity 1339.
- Coccidiostats**,
Streptomyces auranticolor, biosynthesis, structure, new records 2299.
- Coccomyces hiemalis**,
leafspot, Prunus, disease control, fungicides, new records 339.
- Cochliobolus carbonum**,
DNA, isolation methodology, organelles, plasmids 3365.
races, virulence, genetic variance, recombination, black rot, Zea mays, USA, North Carolina 7962.
- Cochliobolus heterostrophus**,
Albi gene, Cyl gene, mat gene, relationship, leaf blight, epidemics, Zea mays 3805.
auxotrophs, population studies, leaf blight, Zea mays 1981.
DNA, isolation methodology, organelles, plasmids 3365.
- Cochliobolus lunatus**,
fructinolysin enzymes, production 3465.
- Cochliobolus myliobaeus**,
conidia, lysis, Myxobacterales, soil microorganisms, biological control, plant diseases 9920.
- Cochliobolus sativus**,
infection, Triticum aestivum, Aphididae, honeydew, enhancement 3806.
overwintering, soil, sporulation, crop residues 5420.
plant diseases, incidence, Elymus junceus 1134.
root rot, Hordeum vulgare virulent components 5428.
- Cochliobolus victoriae**,
conidia, virulence, soil, plant diseases 1090.
phytoalexins production, liquid culture 8743.
- Cocos**,
crop residues, cellulose hydrolysis, cellulase, Trichoderma reesei 8678.
fermentation 5323.
fermentation, microorganisms, biochemical analysis 7848.
- Cocos beans**,
biodegradation association, Penicillium steckii, cell walls degradation enzymes 2823.
- Cocos swollen shoot virus**,
purification, detection, methodology 2437.
- Cocoon**,
spoilage, xerophilic fungi 5344.

- Coccoloba**,
fibers, Basidiomycetes biodegradation, Ascomycetes, Duteromycetes, effects on 1031.
products, aflatoxins, food contamination, incidence, India 7894.
- Cocos**,
plant breeding, *Ficus carica*, host-pathogen interactions, phytopathogenic fungi 2869.
- Cocos nucifera**,
agricultural wastes, + cattle animal wastes, methane production 1487.
fibers, retting, *Aspergillus niger* 7792.
leaves, detection, cadang-cadang disease viroid 3824.
mannans, hydrolysis, β -D-mannosidase, actinomycetes 8604.
roots, *Phytophthora palmivora* infection 5445.
- Coomycetes psocophorae**,
pathogens, host range, use biological control, Culicidae 4395.
- Coomycidium almuili**,
Simulium ornatum biological control, protein composition, phosphatase activity 2646.
- Coenzyme F420**,
Methanobacterium thermoautotrophicum, assays, association, photobleaching, fluorescence decay 6819.
- Coenzyme M**,
biosynthesis, methanogenic bacteria, formic acid metabolism 6825.
- Coenzyme M**,
5,10-methenyl-5,6,7,8-tetrahydromethanopterin, methanogenesis, Methanobacterium thermoautotrophicum 4282.
- Coccoloba**,
cytoplasm, Methanobacterium thermoautotrophicum methanogenesis, membrane vesicles 9035.
- Coffea**,
disease resistance characterization, Hemileia vastatrix leaf rust 306.
Hemileia vastatrix rust, Verticillium psalliotae hyperparasitism, Malaysia 1204.
leaf rust, Hemileia vastatrix, disease control, cuprous oxide, cupric hydroxide 8123.
plant breeding, disease resistance, host-pathogen interactions, phytopathogenic fungi 2869.
rust, Hemileia vastatrix, disease spread, Western Hemisphere 2798.
- blight, disease control, captafol, *Pseudomonas syringae* 4590.
- Coffea arabica**,
cells, defects, Rhizoctonia solani, induction 8821.
coffee berry disease, disease control, fungicides, Colletotrichum coffeanum 5517.
disease resistance variation, Hemileia vastatrix leaf rust 304.
food processing wastes, methanogenesis, bioreactors 7515.
Hemileia vastatrix infection, development, sort, thall 7185.
plant breeding, disease resistance, Ethiopia, coffee berry disease, Colletotrichum coffeanum 2873.
plant breeding, disease resistance, genotype-environment interactions, host-pathogen interactions, leaf rust, Hemileia vastatrix 2872.
plant breeding, Hemileia vastatrix rust disease resistance 6289.
plantations, eyespot, anthracnose, Cercospora coffeicola, shading, rainfall, seasonal variations 273.
plantations, leaf litter decomposition, nutrient cycles, soil microorganisms 5624.
plantations, roots colonization, population levels, vesicular-arbuscular mycorrhizas 5626.
- Coffea canephora**,
disease resistance characterization, Hemileia vastatrix leaf rust 305.
plant breeding, disease resistance, genotype-environment interactions, host-pathogen interactions, leaf rust, Hemileia vastatrix 2872.
- Coffea**,
fermentation, microorganisms 5324.
- Coffea berry disease**,
Coffea arabica, disease control, fungicides, Colletotrichum coffeanum 5517.
Colletotrichum coffeanum, disease resistance, plant breeding, Ethiopia, Coffea arabica 2873.
- Cold**,
adaptations, live vaccines, attenuation, recombinants, influenza A virus 7484.
adaptations, live vaccines, recombinants, attenuation, influenza A virus 7482.
climatic conditions, soil microorganisms, nitrification, soil, Greece 6358.
growth, relationship fatty acid composition, Propionibacterium, dairy starters 3699.
temperature-sensitive mutant, Propionibacterium dairy starters, mutagenesis, N-nitroso-N-methyl-N-nitroguanidine 2729.
- Cold storage**,
Coniferale seedlings, mycorrhizas, ethylene, fungicides, effects on survival 5581.
isolation, gram-negative bacteria, psychrophilic bacteria, Melanogrammus aeglefinus 8703.
milk, coliforms, spoilage 1912.
milk, pasteurization, spoilage, bacteria 1910.
prevention, Cylindrocylindrium heptaseptatum, Cylindrocylindrium pteridis, post-harvest decay, Rumohra adiantiformis 8128.
proteases, extracellular enzymes, effects on recovery, Aeromonas hydrophila 7762.
Rhizobium inoculum, bagasse, soil, carriers, yield, Vigna unguiculata 2982.
seedlings, Basidiomycetes infection, Picea abies 8175.
- Coliforms**,
biological control, Bacillus thuringiensis subsp. tenebrionis 3569.
- Coliforms**,
Puccinia coronata infection, urediniospores production, Avena sativa 2791.
- Coliforms**,
prevention, lactic acid bacteria antagonism intestinal microflora, chickens 1064.
- Colicin B**,
Escherichia coli, structure 3129.
- Colicin E8**,
isolation, characterization, Escherichia coli 3159.
- Colicin E9**,
isolation, characterization, Escherichia coli 3159.
- Colicin M**,
Escherichia coli, antibacterial activity, inhibition murein biosyntheses 7456.
- Colicin N**,
biosynthesis, genetic analysis, Escherichia coli plasmid ColN 4802.
- Colicin typing**,
identification, Shigella sonnei clinical isolates 7612.
- Colicins**,
production, Escherichia coli 4706.
- Coliforms**,
airborne bacteria, abattoirs 1504.
animal isolates, antibiotic resistance, chlortetracycline, relationship feeds additives, pigs 8295.
antibiotic resistance, survival, lagoons, wastewater treatment 1482.
concentrations, reservoirs, British Isles, models analysis 2401.
contamination, feeds, slurries, sheep 7018.
contamination, milk, detection methodology 4445.
contamination, poultry carcasses, meat industry 1051.
contamination, poultry meat products 1049.
drinking water contamination, copper, inhibition, growth 8417.
electrical impedance, enumeration 6761.
enumeration methodology, U.V. radiation disinfection, waste water 9263.
enumeration, most probable number methodology, lakes sediments 9319.
F factors, antibiotic resistance, dogs isolates 3010.
food contamination, minced meat 203.
growth, cheese, nitrate + chloric acid effects on 7842.
growth, storage, eggs 6969.
indicator species, identification, incidence, water temperature relationship, lakes 557.
indicator species, inactivation, waste water, marine environment 1499.
indicator species, incidences, water resources, Iraq 2407.
indicator species, microbial pollution, drainage, water quality, soil amendment, manure, crop fields 6709.
indicator species, sewage sludge, ocean dumping, marine pollution 2389.
intestinal microflora, inhibition, Lactobacillus oral administration, chickens 2751.
isolation, pigs, antibiotic resistance, association, chlortetracycline, treatment 3033.
media (selective) 9300.
media (selective), gelatin 1901.
membrane filtration, drinking water, bacteria interference 2391.
membrane filtration, indicator species, microbial pollution, drinking water 8421.
microbial pollution, bioaccumulation, Chamaelea gallina, coastal waters 4128.
microbial pollution, chlorination, swimming pools 567.
microbial pollution, pollution monitoring, indicator species, spatial distribution, seasonal variations, lakes, USA 8419.
microbial pollution, pollution monitoring, mathematical models, estuaries, coastal waters 3210.
monitoring methodology, waste water 9257.
monitoring methodology, waste water 9258.
phages, indicator species, water quality, water pollution, sewage treatment 4943.
radiation disinfection, fishery products, feeds 5359.
gamma radiation disinfection, sewage sludge 5823.
recovery, drinking water, membrane filtration, most probable number 6714.
spoilage, cold storage, pasteurization, lactoperoxidase, milk 1912.
spoilage, off flavor, organoleptic evaluation, shelf life, milk 4448.
spillage, vacuum packaging, nitrogen packaging, luncheon meat 8715.
tetracycline resistance, incidence, feces, man, hybridization analysis 1316.
- Colistin**,
+ampicillin interaction, Escherichia coli, ampicillin resistance 5772.
Bacillus polymyxa, production, factors affecting 1424.
bactericidal activity, antibiotic resistance, role plasma membranes, protoplasts, liposomes, Bacillus colistinus 9074.
production, aeration effects on, Bacillus polymyxa 4880.
production, feedback inhibition, Bacillus colistinus 4876.
production, stimulation, aspartic acid, phosphate, Bacillus polymyxa 3148.
- Colitis**,
Clostridium difficile, outbreaks, hospitals, biotyping methodology, man 1641.
- Colidionus montanus**,
disease transmission vectors, Spiroplasma citri, isolation, yellows, X-disease 8021.
- Collagenase**,
Clostridium histolyticum, inhibition, phosphonic amides, phosphoric amides 25.
Myxoplasma alive, purification, companion mammalian cells 36.
- Colletia cruciata**,
actinorhizas, Frankia, ultrastructure, nitrogenase, nitrogen fixation 2969.
- Colletotrichum**,
leafspot, Dioscorea alata, factors affecting yield 4588.
Thiophene derivatives antifungal activity, photoinduction 3060.
- Colletotrichum capici**,
boll rot, Gossypium hirsutum, histopathology 5453.
mancozeb + curzate antifungal activity 2085.
- Colletotrichum coccodes**,
host-pathogen interactions, in vitro growth, plant cells monosaccharides 7125.
- Colletotrichum coffeanum**,
coffee berry disease, Coffea arabica, disease control, fungicides 5517.
coffee berry disease, disease resistance, plant breeding, Ethiopia, Coffea arabica 2873.
- Colletotrichum corchorum**,
disease resistance, X radiation, seed treatments, Corchorus capsularis 2905.
- Colletotrichum dematium**,
anthracnose, disease resistance, Lycopersicon esculentum, inheritance 2851.
- Colletotrichum fragariae**,
anthracnose, susceptibility, Lupinus angustifolius 2784.
- Colletotrichum gloeosporioides**,
anthracnose, pathology, Stylosanthes capitata 7932.
antifungal compounds, ripening, fruits, Persea americana 2000.
latent infection, Persea gratissima fruits, nutrients substrates effects on 7987.
polygalacturonase inhibition, fungicides role 1224.
post-harvest decay, disease control, immersion + captafol, blueberries 3851.
rot, Vitis rotundifolia, pathogenesis, disease control 8006.
- Colletotrichum gloeosporioides f.sp. aescynomene**,
spores production, fermenters, weed control, biological control, Aescynomene virginica 3895.
- Colletotrichum gloeosporioides f.sp. jussiaeae**,
spores production, fermenters, weed control, biological control, Aescynomene virginica 3895.
- Colletotrichum gloeosporioides f.sp. minor**,
anthracnose, Mangifera indica, epidemiology 7159.
- Colletotrichum graminicola**,
anthracnose, Poa annua var. reptans, epidemiology, weather 5429.

Subject Index

- Colletotrichum lagenarium**, anthracnose, disease resistance, plant breeding, cultivars, *Citrus* lanatus 8905
- anthracnose**, epidemiology, *Lagenaria* sicaria, India 8830.
- Colletotrichum lindemuthianum**, anthracnose, *Phaseolus vulgaris*, pathogenicity 1122.
- host-pathogen interactions, organellae, *Phaseolus vulgaris* 7142.
- pectin lyase production 5185.
- spores, cell adhesion, *Phaseolus vulgaris*, hypocotyls 3796.
- Colletotrichum malvarum**, spores production, fermenters, weed control, biological control, *Aeschynomene* virginica 3895.
- Colletotrichum sublineolum**, anthracnose, *Zizania aquatica* 1135.
- Colletotrichum trifolii**, anthracnose disease resistance, *Medicago sativa* 5499.
- anthracnose, susceptibility, *Lupinus angustifolius* 2784.
- crop residues, *Hordeum vulgare*, *Medicago sativa*, smoke, antifungal activity 8319.
- Collybia butyracea**, white rot, *Abies alba*, spatial distribution, annual rhythms 4616.
- Collybia maculata**, white rot, *Abies alba*, spatial distribution, annual rhythms 4616.
- Colocasia**, association, saprophytes, *Phytophthora colocasiae*, soil, survival 8958.
- Colocasia antiquorum**, rot, phytopathogenic fungi, etiology, pathogenesis 8010.
- Colombia**, Mycoplasma-like organisms, phylloids, *Manihot esculenta* 8027.
- soil types, *Rhizobium* inoculation, *Leguminosae* nodulation, nitrogen yield 2158.
- Colonial characteristics**, BCG, vaccines production 4079.
- Pseudomonas aeruginosa*, antibiotic resistance 526.
- Colonies**, Mycoplasma, staining, measuring techniques 5893.
- Neurospora crassa*, filters hybridization methodology 2534.
- nitrogen cycle, *Eudryates chrysophilus*, *Aspergillus patagonicus* 9003.
- Colonization**, bacteria, carbon (activated) granules, drinking water treatment 553.
- factors, antigens, *Escherichia coli*, hemagglutination, clinical microbiology 701.
- surfaces, continuous culture, mathematical models, *Pseudomonas aeruginosa* 5059.
- Colony-forming cells**, Paracoccidioides brasiliensis viability determination methodology 2535.
- Color**, compounds, production, food industry, enzymes, microorganisms 200.
- removal, melanoidin, enzymes, intracellular levels, *Coriolus* 3471.
- Colorimetry**, alcohols, applications, *Sansenella polymorpha* alcohol oxidase, preparation 3446.
- bacteria siderophores assays, methodology, in vitro 661.
- cephalosporins, clinical isolates, β -lactamase production 487.
- methodology, biomass, *Bordetella pertussis* 9323.
- methodology, glutaminase activity measurements, soil 8212.
- methodology, molds detection, food processing 6185.
- Colony-forming cells**, *Rhizosphere* bacteria population levels 7264.
- Colpoma quercinum**, *Quercus robur* branches 7218.
- Column**, aeration, sewage treatment, bacteria media (culture), oxygen adsorption rates 3291.
- Column chromatography**, use, separation techniques, *Aspergillus aflatoxins* 5374.
- Combined vaccines**, *Corynebacterium diphtheriae* toxoids, *Haemophilus influenzae* polysaccharides, immunogenicity, rabbits 6855.
- live, Marek's disease virus, infectious bursitis virus, herpesvirus (turkey), production, embryo fibroblasts, chickens 7486.
- synthetic peptides, *Corynebacterium diphtheriae* toxins, *Streptococcus*, antibody response, mice 9219.
- Combustion**, sewage sludge, pathogens, *Salmonella*, pollution control 2368.
- Commensal communities**, brome mosaic virus infection, pathology, *Lema sexpunctata* vectors 284.
- Commensal diffuse**, brome mosaic virus infection, pathology, *Lema sexpunctata* vectors 284.
- Commercial species**, research programs, biological control, weed control, microorganisms 3896.
- Communication**, role, airborne bacteria contamination, postoperative infection, operating theaters, man 4960.
- Communities**, bacteria, chlorophenol biodegradation 182.
- Community composition**, rhizosphere microorganisms, mixed culture, *Lolium perenne*, *Plantago lanceolata*, *Trifolium repens* 372.
- Community structure**, bacteria, biomass, fatty acids analysis, *Rhizophora* sediments 8989.
- bacteria, ground water 5817.
- Compatin**, hydroxylation, *Absidia coerulea*, *Penicillium citrinum* 519.
- Competition**, entomycorrhizas, inoculum potential, roots colonization, trees 5563.
- entomycorrhizas, roots colonization, inoculation, plants 5568.
- fungal flora interaction post-harvest decay fungi, factors affecting 8050.
- nodulation, *Rhizobium leguminosarum*, *Rhizobium japonicum*, *Pisum sativum*, *Glycine* 2967.
- Pseudoperonospora cubensis* strains, metalaxyl resistance, downy mildew, *Cucumis sativus* 341.
- Rhizobium japonicum* strains, *Glycine* max nodulation 408.
- Rhizobium leguminosarum* var. *trifolii* strains, inoculation, nodulation, *Trifolium repens* 3962.
- Rhizobium* strains, *Leucaena leucocephala* nodulation, tropical environment soil 7267.
- thermophilic microorganisms, starter cultures, composting, bark 4103.
- vesicular-arbuscular mycorrhizas, symbiosis, *Trifolium* 3935.
- Complement**, anti, immunofluorescence, use, detection, varicella-zoster virus antibodies, serum, man 1586.
- antibacterial activity, susceptibility, stimulation, polymyxins derivatives binding outer membranes, gram-negative bacteria 4803.
- bacterial acid activity, *Escherichia coli* outer membranes, polymyxin B derivatives antibacterial activity 5784.
- Complement fixation**, assays, influenza virus antibodies 3235.
- assays, use, *Pseudomonas aeruginosa* capsules antigens 2467.
- Brucella abortus* vaccination, tests comparison, hemolysis, cattle 1582.
- Coccidioides immitis* antibodies detection methodology 1674.
- Coccidioides immitis* antibodies quantitation, comparison immunodiffusion 815.
- comparison, enzyme-linked immunosorbent assay methodology, respiratory syncytial virus antibodies 5008.
- detection, *Brucella ovis* antibodies, sheep, comparison enzyme-linked immunosorbent assay 4204.
- detection, cytomegalovirus (human) antibodies 1551.
- detection, *Mycoplasma hyophomae* antibodies, comparison, enzyme-linked immunosorbent assay, indirect hemagglutination 740.
- detection, rotavirus (human), feces, man 641.
- methodology, rinderpest virus antigens detection 3257.
- methodology, foot-and-mouth disease virus typing 3254.
- Mycoplasma pneumoniae* antibodies detection, comparison enzyme-linked immunosorbent assay 1863.
- screening, cytomegalovirus antibodies, blood donors 2448.
- Complexes moniliformis**, inoculation, growth stimulation, *Picea sitchensis* 5565.
- Compositae**, bidens mottle virus infection susceptibility 3825.
- Composting**, actinomycetes, aerobic bacteria, cellulolytic bacteria, sewage sludge, crop residues, *Oryza sativa* 7492.
- aeration, sewage sludge 5832.
- aerobic conditions, animal wastes, Korea, Rep. 4101.
- agricultural wastes, developing countries 4097.
- animal wastes, *Scopularia brevicaulis*, cellulase, production 928.
- bark, solid wastes, agricultural wastes 4099.
- bark, starter cultures, competition, thermophilic microorganisms 4103.
- biodegradation, 2,4,6-trinitrofluorene, hexahydro-1,3,5-trinitro-1,3,5-triazine, soil decontamination 7511.
- biotechnology 2369.
- Brazil 9237.
- crop residues, disease control, phytopathogenic fungi 2842.
- food processing industrial wastes, thermophilic fungi survival 4114.
- industrial wastes 5838.
- industrial wastes, paper mills 5836.
- industrial wastes, textile industry, wool 5837.
- inoculation, Azotobacter, *Aspergillus awamori*, phosphate-dissolving bacteria 8391.
- organic matter, rhizosphere microorganisms, effects on *Sorghum vulgare* roots, soils (sandy), clays 2121.
- phosphate, phosphate-dissolving bacteria 6343.
- sewage sludge 5833.
- sewage sludge 5834.
- sewage sludge, aeration, bulking agents, tires 4082.
- sewage sludge, anaerobic conditions, methanogenesis 4102.
- sewage sludge, *Aspergillus fumigatus* air spore recovery 3213.
- sewage sludge, books 5090.
- sewage sludge, microorganisms, succession, temperature, effects on 5819.
- sewage sludge, C/N ratios monitoring 5841.
- sewage sludge, pathogens inactivation 5839.
- sewage sludge, pathogens inactivation, monitoring 5840.
- sewage sludge, ponds, nutrient sources, phytoplankton 6689.
- sewage sludge, respiration monitoring 5842.
- sewage sludge, solid wastes 3199.
- sewage sludge, solid wastes 4098.
- sewage sludge, solid wastes, developing countries 5835.
- sewage treatment, recreation sites, USA, Vermont 4922.
- solid wastes 4081.
- solid wastes, nutrient sources, phytoplankton 6689.
- temperature, aeration, agricultural wastes, industrial wastes, wool 4100.
- temperature, evaporation, oxygenation, ventilation 4085.
- waste treatment, food processing, industrial wastes 6682.
- waste treatment, Japan, biotechnology 4923.
- Composts**, disease control, soil-borne diseases, *Rhizoctonia*, ornamental plants 6300.
- fermentation, culture, *Basidiomycetes* 8706.
- +fertilizer applications, initiation vesicular-arbuscular mycorrhizas, yield, *Zea mays* 3948.
- fungi, antagonists, damping-off suppression, *Rhizoctonia solani*, *Raphanus sativus* 290.
- heat production, mathematical models, *Basidiomycetes* 4463.
- isolation, *Nocardia* identification 8198.
- Lycoriella* mall, biological control, *Bacillus thuringiensis* subsp. *israelensis* 6103.
- phosphatase activity, *Aspergillus awamori*, *Paeclomyces fusiformis* 7491.
- sewage sludge, soil amendment, disease control, fungi, crops 5488.
- sewage sludge, soil amendment, disease control, soil amendment 311.
- solid wastes, fertilizer applications, soil amendment, Switzerland 6392.
- solid wastes, manure, soil amendment, effects on, population levels, soil microorganisms 3972.
- straw, *Triticum aestivum*, *Vicia faba*, thermophilic fungi 6168.
- thermophilic microorganisms, *Basidiomycetes* culture 1681.
- Compound Bu-2743E**, *Bacillus circulans*, production, aminopeptidase (cytosol) inhibitors 1702.
- Comptonia peregrina**, host alternation, *Cronartium comptoniae*, rust, epidemiology, *Pinus banksiana* 5602.
- Computer applications**, antibiotic sensitivity testing, photometry, bacteria 3076.
- automated methods, monitoring, fermentation 6116.
- AutoMicrob test, *Enterobacteriaceae* identification 1645.
- bacteria enumeration, most probable number 4209.

Computer applications, (continued)

- bioreactors, dynamics 2426.
drug sensitivity testing, antimicrobial agents concentration 4006.
fermentation processes, microorganisms 2551.
gas chromatography, use, measuring techniques, ethanol production 160.
host-pathogen interactions models, plant diseases 3767.
information systems, clinical microbiology, bacteria analysis 6770.
mass spectroscopy, fermentation monitoring 170.
mathematical models, fermentation, optimization 6133.
mathematical models, glucose nutrient deficiency, growth, *Escherichia coli* 4173.
mathematical models, growth, bacteria 4172.
mathematical models, monitoring, fermentation 6115.
monitoring, chlorobium thiosulfatophilum, hydrogen sulfide, carbon dioxide, nitrogen, fixation, bioreactors 3612.
monitoring, control, growth, *Vibrio natriegens*, *Bacillus thuringiensis*, cell culture 3326.
monitoring, fermentation 6145.
monitoring, fermentation, biomass measurements, cellulose biodegradation, *Sporocytophaga myxococcoides* 6165.
monitoring, fermentation, yeasts 5966.
monitoring, mathematical models, digestion (anaerobic), wastewater treatment 6705.
monitoring, methanol addition, batch culture, fermentation, *Pseudomonas* 8633.
monitoring, optimization, fermentation, single-cell protein production, *Saccharomyces cerevisiae* 5967.
monitoring, oxygen consumption, carbon dioxide, fermentation, ethanol production, *Saccharomyces cerevisiae* 6140.
monitoring, Pekio process, sulfite liquor fermentation, single-cell protein production, *Paeclomyces varioti* 5968.
monitoring, phenol inhibition, oxygen consumption, activated sludge 6703.
monitoring, sucrose fermentation, ethanol production, immobilized cells, *Saccharomyces cerevisiae* 6143.
most probable number, indicator species, calculators 6731.
noise filters, ethanol production, batch culture, growth, yeasts 3630.
Penicillium chrysogenum penicillin production 2269.
plant diseases, disease spread, phytopathogenic fungi 6220.
plant diseases, phytopathogenic fungi, disease spread, mathematical models 7127.
sensors, ethanol levels, fermentation 3635.
video imaging, disease spread, plant diseases 236.

Computer graphics,

- X-ray crystallography, structure, β -lactam antibiotics 7462.
Computer programs,

- antiviral agents dosage, antiviral activity, herpes simplex virus 1 8323.
Cervisiae, β -D-fructofuranosidase, activity, stability 1770.
bacteriology, clinical microbiology 2474.
culture collections, bacteria, plasmids, genetic markers 756.
Staphylococcus identification, gas chromatography 2498.

Concansavlin A,

- Sepharose, immobilization *Aspergillus niger* glucose oxidase + *Saccharomyces cerevisiae* β -D-fructofuranosidase, activity, stability 1770.

Conditional mutant,

- Escherichia coli* cell division, mecillinam effects on 3102.

Confectionery,

- yeasts, spoilage, water activity, pH, temperature, potassium sorbate effects on 8636.

Conferences,

- antibacterial activity, rifamycin 7650.
antibiotic resistance, antibiotics structure, assays 847.
Ascochyta blight, *Cicer arietinum* 4247.
bacteria, drug resistance, genetic control, books 3389.
biodegradation, fungi, bacteria, books, 1697.
biotechnology, biochemical characteristics, cells 1696.
biotechnology, genetic engineering, microorganisms, books 8500.
biotechnology, industries, microorganisms 5950.
biotechnology processes, models 3394.
books, airborne microorganisms, disease transmission, plant diseases 6797.
books, biological control, fungi, Aphididae 5944.
books, biological control, weeds control 4249.
books, biomass, single-cell protein, production, peat hydrolysates, fungi 7645.
books, biomass, use, energy production 1700.
books, biotechnology 3397.
books, biotechnology, protoplasts 3399.
books, hepatitis B virus vaccines production 6799.
books, microorganisms genetic engineering, use, waste treatment, chemical pollution biodegradation 3392.
books, mycorrhizas, Basidiomycetes, ecological distribution, Arctic, alpine environments 2546.
books, mycotoxins food contamination, mycotoxicosis association, man, animals 7647.
books, nitrogen fixation, genetic engineering, nitrogen-fixing bacteria 3395.
books, plant breeding, disease resistance 3396.
books, plant viruses, fruit trees 3400.
books, protoplasts, biotechnology 5948.
books, single-cell protein production, fermentation, lignocelluloses, whey, nutritive value 2544.
books, vaccines, genetic engineering, viruses 6800.
brewing 1698.
brewing 1699.
clinical microbiology 7641.
continuous culture, microorganisms 1685.
crown gall, disease control, biological control 848.
disease resistance plant breeding, Africa 9349.
disinfection, sewage sludge 2542.
ectomycorrhizas, trees 5945.
energy production, biomass, biotechnology 4248.
Erwinia amylovora, fire blight, *Pyrus communis* 5947.
ethanol production, biotechnology, yeasts, bacteria 5943.
fermentation, biotechnology 3393.
food contamination, microorganisms 4246.
Frankia, actinorrhizas, nitrogen fixation, *Alnus* 8499.
Frankia, nitrogen fixation, actinorrhizas, *Alnus* 5100.
genetic engineering, biotechnology, brewing, fermentation 3390.
genetic engineering, biotechnology, fermentation 4250.
hepatitis viruses vaccines standardization 4245.
immobilized enzymes 850.
industrial wastes, waste treatment 4244.

Conferences, (continued)

- Insecta, biological control 846.
microorganisms, infection, seeds, pathology, books 3398.
moxalactam, antibacterial activity, infection treatment 5949.
mutagenicity testing, environmental factors, bacteria, phages, books 3388.
nitrogen-fixing bacteria, genetic engineering, plants, plant viruses 4243.
odors, actinomycetes, off flavor, water quality 3387.
phytopathogenic fungi diseases, India 2547.
phytoalexins, phytopathogenic fungi 9347.
plant diseases 7643.
plant diseases 7644.
plant diseases, bacteria, viruses, phytopathogenic fungi 9350.
plant diseases, crops, yield reduction, mathematical models 849.
plants genomes, structure-activity relationships, nitrogen fixation, nitrogen-fixing bacteria, plant viruses, host-pathogen interactions 3391.
public health, environmental hygiene, disease control 1501.
public health, microbial pollution, environmental hygiene 7642.
soil microorganisms, biogeochemistry, metals uptake 2543.
soil microorganisms, soil fertility 5946.
sterility, filtration, fermenters 9348.
waste disposal, environmental hygiene 2548.
wastewater treatment 2545.
wastewater treatment, nutrient loading 2549.
water pollution, wastewater treatment, indicator species 2550.
- Congo red,**
agar, measuring techniques, virulence, *Yersinia enterocolitica* 749.
- Congo virus,**
surfaces structure, electron microscopy staining, models 5004.
- Conidia,**
Beauveria bassiana, pathogenicity, relative humidity effects on, biological control, *Blissus leucoporus* 7766.
Beauveria bassiana, subculture effects on pathogenicity, biological control, *Geophilus* 2656.
Bipolaris victoriae, spore germination, soil fungistasis, role bacteria 8966.
cellulase, β -D-glucosidase, purification, characterization, *Termitomyces* 6844.
Cladosporium carophilum, release, environmental factors, disease spread, scab 272.
Cochliobolus miyabeanus, lysis, Myxobacterales, soil microorganisms, biological control, plant diseases 8920.
Cochliobolus victoriae, virulence, soil, plant diseases 1090.
Erysiphe pisi, spore germination, relationship, direct light, comparison, *Pisum sativum* leaves light penetration 2774.
fungi, preparation, use, scanning electron microscopy 2532.
Fusium lateritium, antagonism, biological control, *Eutypa armeniacae* wound infection, orchards, *Prunus armenica* 6307.
germination, *Neurospora crassa*, protein biosynthesis 3478.
Helminthosporium victoriae, spore germination, pure culture, comparison, soil fungistasis 2928.
Hirsutiella thompsonii var. *synnematos*, production, liquid culture, inoculum, biological control, *Phyllocolpa oleivora* 3363.
Monilia fructicola, air spores, samplers, epidemiology 804.
Monilia fructicola, spore germination, size, pathogenicity, temperature effects on, in vitro, in vivo, fruits, *Prunus persica*, *Prunus persica* nectarina 7992.
N-nitrosomethyl biuret mutagenesis, penicillin biosynthesis, *Penicillium chrysogenum* 2268.
Nomuraea rileyi, pathogens, biological control, *Trichoplusia ni* 6900.
overwintering, *Claviceps purpurea* infection, *Poa annua* 7175.
Peronospora hyoscyami, infectivity, overwintering, blue mold, *Nicotiana tabacum* 8817.
production, *Erysiphe graminis*, f.sp. *hordei*, powdery mildew, *Hordeum vulgare* 7957.
production, *Helminthosporium solani*, media (culture), silver scurf, *Solanum tuberosum* 8491.
Pycirularia oryzae, spore germination, inhibition, caffeic acid, superoxide, free radicals, role disease resistance, plant diseases 8889.
silver bioaccumulation, autoradiography, *Botrytis cinerea* 8484.
Sorococcus clavigerula-*Juglans nigra* complex, survival, airborne microorganisms, *Juglans cinerea* cankers 1138.
sporangiospores, separation techniques, fungi, dextran, polyethylene glycol, solutions, two-phase systems 8489.
spore germination, germ tubes formation, antifungal activity, *Trichophyton mentagrophytes* 5738.
spore germination, life cycle, *Penicillium daleae*, *Penicillium bilaii*, soil 8959.
spore germination, *Verticillium lecanii*, inhibition, carbaryl+iprodione, integrated control, Aphididae 2654.
Trichophyton mentagrophytes, imidazoles sensitivity 1340.
Verticillium albo-atrum, antigenic characteristics, relationship virulence, *Humulus lupulus* 2006.
- Conidiobolus**
antifungal activity, amphotericin B, miconazole, ketoconazole, 5-fluorocytosine, potassium iodide 7380.
- Conidiobolus obscurus,**
biological control, pathogenicity, field trials, Aphididae 5230.
inoculum production, biological control, Aphididae 5231.
- Coniferales,**
Armilaria mellea root rot, susceptibility, relationship, soil nutrients, soil pH 2919.
callus culture, disease resistance, *Phaeolus schweinitzii* infection 2826.
fungi plant diseases effects on growth, USSR 5603.
roots, *Pisolithus tinctorius* spores inoculation, seedlings survival 5607.
seedlings, ectomycorrhizas formation, high-altitude environments, mines 5547.
seedlings, mycorrhizas, cold storage, ethylene, fungicides, effects on survival 5581.
- Coniferly alcohol,**
fungi, biodegradation 190.
- Coniochaeta nepalica,**
ascospores, seasonal variations, soil horizons, forest floor 5540.
- Coniophora cerebella,**
brown rot, wood decay, *Pinus* 8947.
- Coniophora puteana,**
biodegradation, wood, fungicides, prophylaxis 1252.
cell culture filtrates, tributyltin biodegradation 3648.
- Conjugation,**
antibiotic resistance gene transfer, transposons, tetracycline, *Streptococcus* 6431.
erythromycin, tetracycline antibiotic resistance genetic markers, plasmids

Conjugation, (continued)

- deficiency, *Streptococcus pyogenes* 6426.
plasmids, antibiotic resistance, *Klebsiella pneumoniae*, *Serratia marcescens* 4716.
Streptococcus lactis plasmid pSN, sucrose fermentation, nisin biosynthesis 3146.
- Conjunctive,**
cell culture, antiviral activity, interferon- α antibodies, man 2227.
- Contact lenses,**
contamination, *Staphylococcus*, *cornebacterium*, fungi, disinfectants solutions 5871.
fungi contamination, eye, man 1527.
solutions, disinfectants, antifungal activity 5870.
- Contagious equine metritis,**
Haemophilus equigenitalis isolation, incubation time, horses 7573. *
Haemophilus equigenitalis, media (isolation), methodology 3307.
- Contaminers,**
medicine, pathogens contamination, nosocomial environments 1503.
sputum, tuberculosis, man, contamination, *Mycobacterium tuberculosis* 2417.
- Contamination,**
aflatoxin B1, allergens extracts, fungi 3732.
aflatoxins, food, bibliographies 5379.
antimicrobial agents, preservatives, antimicrobial activity 9137.
avian infectious bronchitis virus, vaccines, screening projects 6658.
bacteria, cleaning systems, milk storage tanks 1505.
bacteria, cured products, meat products, food processing 3708.
bacteria, drinking water 2449.
bacteria, enumeration methodology, hemodialysis systems 1638.
bacteria, food processing, meat industry 3706.
bacteria, hygiene, poultry, meat industry, food processing 3707.
bacteria, measuring techniques, comparison, methodology 7575.
bacteria, meat, books 4242.
bacteria, meat reprocessing, poultry 2738.
bacteria, microbiology, meat, public health 4458.
bacteria, poultry meat products 1049.
bacteria, sampling, methodology, meat 3715.
bacteria, sausages 1908.
bacteria, swimming pools, association hair microflora 2405.
bacteria, turkeys carcasses, cleaning systems, meat industry 1053.
bacteria, viruses isolation cell culture, prophylaxis, use, penicillin, comparison, vancomycin 1557.
bacteria, wild type, continuous culture, single-cell protein, yeasts 1707.
blood culture, *Bacillus*, transmission, role, cotton use disinfection 3223.
coliforms, milk, detection methodology 4445.
coliforms, poultry carcasses, meat industry 1051.
contaminated, *Aspergillus* niger isolates, naphtho-pyrene biosynthesis 6105.
Crassostrea virginica, *Vibrio cholerae* isolation methodology 5088.
drinking water, *Aeromonas hydrophila*, seasonal variations, clinical isolates correlation 8414.
drinking water, *Aeromonas*, isolation, Australia 8412.
Escherichia coli, rehydration solutions, characterization 4967.
fiberoptic bronchoscopes, *Mycobacterium tuberculosis*, disinfection 3221.
food, *Campylobacter jejuni* 6195.
food, *Salmonella*, characterization 6971.
fungal flora, counting methods, barn 2052.
ingesting solution, *Penicillium* 5869.
luncheon meat, bacteria growth, nitrite association 2728.
meat, bacteria enumeration methodology, ATP measurements 3304.
microbiology equipment design effects on 583.
microorganisms, beer, reviews 6147.
microorganisms, cosmetics 5751.
microorganisms, enzyme-linked immunosorbent assay equipment, environmental hygiene 2413.
microorganisms, fishery products, temperature effects on 7002.
microorganisms, molasses, continuous culture, ethanol, production, immobilized cells, yeasts 7799.
microorganisms, pasteurization, cooling water, beverages 1913.
microorganisms, pharmaceuticals industries 9147.
microorganisms, pharmaceuticals, nosocomial environments, reviews 9149.
microorganisms, pharmaceuticals, quality control, reviews 9150.
microorganisms, pharmaceuticals, reviews 9148.
microorganisms, pharmaceuticals sterilization quality control, reviews 9146.
milk, *Salmonella* detection, enzyme-linked immunosorbent assay methodology 766.
Mycobacterium tuberculosis, tuberculosis, sputum containers, man 2417.
mycotoxins, assays, dietary intake safety, man, reviews 7045.
mycotoxins, food, detection, thin-layer chromatography 5366.
nosocomial environments, *Clostridium difficile* 2412.
ochratoxin A, *Triticum aestivum* by-products, detection, high-performance liquid chromatography 5367.
oil, sulfate-reducing bacteria 6665.
Paciomyces, growth, tarsins production, corks, wine 7798.
pathogens, medicine containers, nosocomial environments 1503.
pharmaceuticals, microorganisms, books 9343.
poliovirus, drinking water, samples, transport, processing, methodology 7560.
raw materials use production contamination, fungi, bacteria 8342.
sampling, hygiene, meat industry 3714.
Staphylococcus aureus, growth, corned beef, canned food 6180.
Staphylococcus aureus, poultry, food processing, meat industry 6179.
Streptomyces, *Aspergillus*, *Penicillium*, corks, off flavor, wine 1870.
water, solar radiation, heat treatments, water purification, pasteurization, methodology 3225.
- Continuous culture,**
asynchronous cell division, mathematical models, *Escherichia coli* 9294.
atmospheric pressure, aeration, fermenters, *Candida utilis* 924.
biomass, dissolved oxygen coefficients, determination methodology 668.
biomass production, optimization, respiratory quotient monitoring, *Saccharomyces cerevisiae* 8501.
Candida utilis+*Paciomyces variotii*, fermentation, *Saccharum officinale* crop residues 3696.
Candida valida, ethanol, temperature, effects on, growth, association, single-cell protein, production 214.
cell culture, biomass production, use vaccines, *Bordetella pertussis* 9223.
cell permeability, malate dehydrogenase activity, alcohol dehydrogenase activity, *Saccharomyces cerevisiae* 3592.
Clostridium acetobutylicum, acetone, butanol, production 961.
dialysis, fermentation, vegetables, lactic acid bacteria 2740.
ethanol production, whey fermentation, *Kluyveromyces fragilis* 3604.
fermentation, mathematical models, optimization, methodology 7805.

Continuous culture, (continued)

- fermentation, mathematical models, oscillations, levels, substrates, biomass 5280.
fermentation, mixed culture growth condition 3633.
fermentation, production, butanol, ethanol, *Clostridium thermosaccharolyticum* 3578.
fermentation, *Saccharomyces cerevisiae*, extraction, ethanol 7808.
fermenters, ethanol, production, *Saccharomyces cerevisiae* 981.
Gaeumannomyces graminis var. *tritici*, plant diseases, factor affecting pathogenicity 1091.
 β -D-galactosidase production, *Trichoderma reesei* 8541.
growth rate measuring techniques, *Pseudomonas* 1639.
Kluyveromyces fragilis, inulinase, association, β -D-galactosidase, production 7745.
lipids biosynthesis, growth rate, *Cryptococcus albidus*, *Trichosporon pullulans* 6925.
methodology, microorganisms, ecological evaluation, laboratories, reviews 4974.
microorganisms, conferences 1685.
microorganisms, contamination, molasses, ethanol, production, immobilized cells, yeasts 7799.
milk fermentation, yogurt, dairy starters, lactic acid bacteria 6997.
Nitrobar growth, batch culture comparison, soil isolates 9016.
oils sterilization, antibiotics production, fermenters 9154.
oxygen uptake effects on, *Saccharomyces cerevisiae* 4229.
oxytetracycline, production, *Streptomyces rimosus* 4056.
pectinolytic enzymes production, *Aspergillus niger* 8601.
pH levels, growth, *Saccharomyces cerevisiae* 5085.
Photobacterium phosphoreum, methodology 1607.
photosynthesis, energetics, phototrophic bacteria 9304.
Polyporus squamosus mycelium, growth rate 822.
polysaccharides, production, *Alcaligenes faecalis* 2629.
productivity comparison, batch culture, *Candida brassi* 5104.
Pseudomonas putida, films formation, environmental effects 669.
Pseudomonas putida, nicotine stereoisomers, preparation 132.
rumen microorganisms, fermentation, liquids dilution rates, pH 5295.
surfaces colonization, mathematical models, *Pseudomonas aeruginosa* 5059.
surfactants, lipids production, *Pseudomonas aeruginosa* 8922.
Trichoderma reesei, cellulase, production, characterization 101.
whey, lactose, fermentation, catabolic repression resistance mutants, *Saccharomyces cerevisiae* 8688.
xylose isomerase production, *Arthrobacter globiformis* 6870.
- Conversion,**
cellulose, citric acid production, models 3432.
cellulose, glucose production, *Gossypium hirsutum*, *Verticillium wilt*, cellulase 3683.
ethanol, acetaldehyde production, *Candida utilis* 3684.
molasses, hydrogen production, immobilized cells, *Clostridium butyricum* 3577.
sterols, steroids production, immobilized cells, *Mycobacterium phlei* 4357.
whey, production, acetone, butanol, *Clostridium acetobutylicum* 4381.
D-xylose, ethanol production, *Saccharomyces cerevisiae* 3643.
- Cooking,**
eggs, inactivation, *Salmonella typhimurium*, *Staphylococcus aureus* 1050.
extraction, ammonium hydroxide, effects on, aflatoxins, peanuts, flour 3749.
temperature oven, poultry, inactivation, *Salmonella typhimurium*, *Staphylococcus aureus* 1048.
microwave, bacteria inactivation, stuffing, poultry 5349.
- Cooling systems,**
leakage, contamination, fermenters 8507.
- Cooling towers,**
bacteria, ozone bactericidal activity 5851.
Legionella pneumophila contamination, 1-bromo-3-chloro-5,5-dimethylhydantoin chemical control 7531.
Legionella pneumophila geographical distribution, seasonal variations, USA 4130.
microorganisms sediments analysis 561.
- Cooling water,**
microorganisms contamination, pasteurization, beverages 1913.
leakage, effects on, plant diseases 623.
temperature effects on glutamic acid uptake, heterotrophic bacteria 1493.
- Comb's test,**
brucellosis diagnosis, titration methodology 784.
- Coagulase,**
leaves resins, antifungal activity, *Pestalotia subcuticularis* 5506.
immobilized enzymes methodology, urease 3468.
- Copper(II),**
bacitracin A complex, E.S.R., *Bacillus licheniformis* 1413.
- Copper,**
active sites, catechol oxidase, monophenol monooxygenase, role tryptophan, Neurospora 6148.
Neurospora 6148.
azurin, fluorescence, *Pseudomonas fluorescens* 909.
bioaccumulation, polysaccharides adsorption, *Zoogloeia ramigera* 3973.
bioaccumulation, polysaccharides adsorption, *Zoogloeia ramigera* 3975.
chelation, 3-(2-carboxyhydrazine)-phenylimino-2-oxinobutane, antibacterial activity, *Mycobacterium* 4005.
complex, catechol oxidase, monophenol monooxygenase active sites, *Neurospora crassa* comparison *Agaricus bisporus* 5174.
effects on, wastewater treatment, activated sludge 4113.
extracellular levels, *Methylobacillus capsulatus*, *Methylobacillus trichosporum*, nutrient requirements, intracellular localization, methane monooxygenase 3007.
inhibition, coliforms growth, drinking water contamination 8417.
inhibition, ectomycorrhizas, roots colonization, *Picea sitchensis* 8168.
Klebsiella aerogenes capsules polymers binding, activated sludge 6679.
leaching, industrial wastes, *Thiobacillus ferrooxidans*, *Leptospirillum ferrooxidans*, *Sulfolobus thermosulfidobindans* 7301.
levels, brewing, fermentation, yeasts 6128.
nutrient requirements, *Aspergillus aflatoxins* biosynthesis 7068.
nutrient requirements, growth, methylotrophic bacteria 8476.
nutrient uptake, mycorrhizas, plants 5627.
nutrient uptake, stimulation, vesicular-arbuscular mycorrhizas, *Arachis hypogaea* 5641.
pollution effects, community composition, soil microorganisms 2142.
toxicity, *Bacillus megaterium*, siderophores enhancement 6444.
toxicity, bacteria, soil amendment 4675.
toxicity, *Neurospora crassa* 1312.
uptake, *Allium porrum*, *Glomus mosseae* effects on 384.

- Copper naphthenate**,
Aspergillus niger, biodegradation, characterization 1038.
- Copper sulfate**,
 -antibiotics, disease control, canker, downy mildew, powdery mildew 8139.
 disease control, *Pseudomonas syringae* pv. *morspunorum*, canker, *Prunus cerasus* 344.
- Copper-chrome-arsenic**,
 odometry, chemical analysis, wood preservatives 7244.
- Coprinus cinereus**,
 chitin synthase purification 4308.
- Coprinus congregatus**,
 primordia formation, cell culture methodology, protein biosynthesis, nucleic acids biosynthesis, inhibition 2527.
- Coprinus lagopus**,
 calmodulin multiple forms, purification, characterization, U.V. spectroscopy 8513.
- Coprinus psychromorbidus**,
 infection, electron microscopy, pathology, *Triticum aestivum* 7933.
- Corchorus capsularis**,
 X radiation, seed treatments, disease resistance, *Colletotrichum corchorum* 2905.
- Corchorus depressus**,
 plant extracts, antimicrobial activity 8339.
- Coryceps**,
 N⁶-(2-hydroxyethyl) adenosine, purification, biological activity, calcium antagonists, inotropism, guinea-pigs 6060.
- Coriander feathery red-vein virus**,
 vectors, *Hyadaphis foeniculi*, USA, California 3822.
- Coriandrum sativum**,
 coriander feathery red-vein virus, vectors, *Hyadaphis foeniculi*, USA, California 3822.
- Coriolus**,
 enzymes, intracellular levels, melanoidin color removal, extracellular polymers, polysaccharide composition, antitumor activity 3471.
- Coriolus versicolor**,
 biodegradation, *Triticum aestivum* lignocelluloses 6943.
 cell culture filtrates, tributyltin biodegradation 3648.
 infection, phytoalexins induction, defensive mechanisms, *Ulmus glabra* 5500.
 lignin, biodegradation, metabolism 5308.
 white rot, detritus effects on pathogenesis, *Cynodon dactylon*, *Eremochloa ophiuroides*, *Poa pratensis*, *Stenotaphrum secundatum* 8785.
- Corm rot**,
Fusarium, *Gladiolus*, disease resistance 2063.
- Corn**,
 aflatoxin B1 decontamination, ammonia+heat 7889.
 aflatoxins food contamination, control, reviews 222.
 aflatoxins food contamination, factors affecting production, reviews 7052.
Aspergillus niger, association, *Aspergillus flavus*, aflatoxins, production, factors affecting, inhibition 2756.
 barley yellow dwarf virus hosts, intermediates, association Gramineae infection 1996.
 dust, association, fungi 1904.
 ethanol fermentation, catabolite repression, *Saccharomyces cerevisiae* 2677.
 ethanol fermentation, mannitol, sorbitol, inhibition, *Saccharomyces cerevisiae* 2678.
 ethanol production, yeasts, γ radiation effects on 351.
 feeds, pelleting, propionic acid, effects on fungi, contamination 7884.
 fermentation, ethanol production, *Aspergillus awamori*, *Aspergillus niger* 5290.
 fermentation, lactic acid bacteria, 6-phytase, phosphorus release 6977.
 food contamination, molds, toxins production, water content, temperature, propionic acid, effects on 2749.
 food processing, industrial effluents, methanogenesis, wastewater treatment 7510.
Fusarium zeareolone incident 1079.
 meal, detection aflatoxins food contamination, methodology comparison 7066.
 meals, fermentation, vitamins levels, lactic acid bacteria 5356.
 meals, +soybeans meals, fermentation effects on amino acid composition, lactic acid bacteria 5357.
 oils, effects on antibacterial activity, butylated hydroxyanisole, tertiary butylhydroquinone 6450.
 aflatoxins decay, fungal flora, ergosterol levels, indicators 2051.
 silage, biodegradation, microorganisms, aerobic conditions 5360.
 silage, fermentation, ammonia preservation 2744.
 +soybeans, meals, fermentation effects on nutritive value, minerals, lactic acid bacteria 5355.
 storage, fungi, biodegradation 1165.
 storage, preservation, ammonia+propionic acid, spoilage, bacteria, fungi 7025.
 syrup production, fungi immobilized enzymes systems 208.
 trichothecenes food contamination, *Tetrahymena pyriformis* use screening 7055.
 ± whey fermentation, production, ethanol, proteins feeds 982.
- Cornmeal**,
 temperature effects on, amino acids levels, lactic acid bacteria 7881.
- Coronaviruses**,
 antibodies detection, radioimmunoassay, enzyme-linked immunosorbent assay 2430.
 detection, feces, cattle, electron microscopy comparison enzyme-linked immunosorbent assay 8434.
- Coronavirus (bovine)**,
 detection, capture enzyme-linked immunosorbent assay, monoclonal antibodies, man 4167.
 detection, passive hemagglutination methodology, feces 5886.
- Coronilla varia**,
 disease reservoirs, host alternation, rust, *Phakopsora pachyrhizi* 7940.
- Cornoids**,
 cyanocobalamin like compounds, biosynthesis, *Clostridium* 7779.
- Corrosion**,
 dental restorative materials, plastics, *Pseudomonas aeruginosa* 4965.
 pipes, sulfate-reducing bacteria, oil and gas industry, reviews 8411.
 steel, *Desulfobivibrio vulgaris*, *Vibrio anguillarum* effects on 2722.
- Cortinarium**,
 mushroom poisoning, clinical aspects, kidney, man 1903.
 toxins, characterization 1950.
 toxins, high-performance liquid chromatography 3741.
- Cortinarium speciosissimum**,
 crellanine, toxicity, photosynthetic apparatus, *Lemna minor*, structure-activity relationships 8734.
 toxins structure 8734.
- Corylobium avellanae**,
 biological control, *Entomophthora planchoniana* pathogens, orchards, Italy 5234.
- Corynebacterium**,
 contact lenses contamination, disinfectants solutions 5871.
 cyanocobalamin production 2841.
 distribution, incidence, pasture, nematocides effects on 7295.
 gallic acid production, biodegradation, tannins, *Craesalpinia spinosa* 5106.
 identification, API test 5041.
 identification, use, biochemical analysis 3316.
 isolation, media (selective) 5031.
 +lactic acid bacteria, retting, organoleptic evaluation, fermented food, cassava 3698.
 metabolism, furan, tetrahydrofuran, reviews 7824.
 plant diseases, diagnosis 3780.
 plant diseases, diagnosis, characterization 3777.
 reactors, cutting fluids biodegradation, bacteria identification 178.
 sarcosine oxidase, cysteine, histidine residues chemical modification 12.
 sarcosine oxidase, dithiothreitol reduction, kinetics 6842.
 sarcosine oxidase, immobilized enzymes, use, electrodes, creatine, creatinine 89.
 soil, ferric oxide reduction 8260.
 steroid Δ1-dehydrogenase isoenzymes, purification, substrate specificity 64.
- Corynebacterium bovis**,
 growth, toxins production, sodium chloride effects on 8760.
- Corynebacterium diphtheriae**,
 counter immunoelectrophoresis, toxigenicity 7900.
 identification, pyrazine carboxylamidase activity screening, U.V. radiation fluorescence 6930.
 identification, use, biochemical analysis 3316.
 synthetic peptides, adjuvants, N-acetyl-muramyl-L-alanyl-D-isoglutamine, *Clostridium tetani* toxoids, antigenicity, vaccines, mice 6656.
 toxins, amino acid sequence, nucleotide sequence, genes 7119.
 toxins, conformation association acids, sodium chloride effects on, fluorescence 5388.
 toxins genes, tox gene nucleotide sequence, amino acid sequence predictions 7912.
 toxins, purification, chromatography 3750.
 toxins, synthetic peptides, combined vaccines, *Streptococcus*, hepatitis B surface antigen, antibody response, mice 9219.
 toxins, toxoids, purification 4889.
 toxoids, +Haemophilus influenzae polysaccharides, combined vaccines, immunogenicity, rabbits 6655.
 toxoids immunogenicity, correlation purification methodology 4891.
 toxoids, purification, immunogenicity 4892.
- Corynebacterium equi**,
 alicyclohexanoid ketones production 8649.
 hydrogenation chalcone carbon bonds 6153.
- Corynebacterium fascians**,
 immobilized cells, nonlin conversion obacunone, bitter principle removal, fruit juices, Citrus 7773.
 leafy gall, Lilium, etiology, Belgium 4531.
- Corynebacterium ferrindurans**,
 ferric oxide reduction, assays, methodology 7606.
- Corynebacterium glutamicum**,
 bacteriocins, biosynthesis, physicochemical properties 9200.
 gene transfer, proplasts transformation, plasmids DNA 6059.
 glutamic acid overproduction, metabolic pathways, reviews 7667.
 L-lysine biosynthesis 3405.
 L-lysine production, carbon sources 866.
 L-lysine production, nitrogen sources, flour, *Psophocarpus tetragonolobus* 7670.
- Corynebacterium insidiosum**,
 wilt, *Medicago sativa*, disease resistance effects on phosphorus uptake 3879.
- Corynebacterium medianoanum**,
 bacteriocinogeny 8550.
- Corynebacterium michiganense**,
 pathogens reduction, digestion (anaerobic), agricultural wastes 8390.
 wilt, *Medicago sativa*, hydroxyproline content, cell walls, association 7928.
- Corynebacterium michiganense subsp. michiganense**,
 canker, disease reservoirs, soil-borne diseases, crop residues, *Lycopersicon esculentum* 8872.
 identification, plant diseases, *Lycopersicon esculentum* cotyledons lesions 1158.
- Corynebacterium michiganense subsp. tritici**,
 incidence, *Anguina tritici*, association, spike, *Triticum aestivum* 8803.
- Corynebacterium petrophilum**,
 induction emulsification reversal, water-in-oil emulsions 1878.
- Corynebacterium pseudotuberculosis**,
 toxins, characterization 3757.
- Corynebacterium rathayi**,
 toxins production, infection, canker, pasture, *Lolium perenne* 6215.
- Corynebacterium renale**,
 EDTA-tromethamine+antimicrobial agents antibacterial activity 4816.
 indicator species use, *Staphylococcus aureus* bacteriocin phenotypes detection 4883.
- Corynebacterium sepedonicum**,
 antisera, immunofluorescence, microscopy, cross-reactivity, soil microorganisms, association, *Solanum tuberosum* 7186.
 infection, diagnosis, *Solanum tuberosum* tissues 8869.
 plant diseases, immunodiagnosis, fluorescent antibody test, books 3385.
 ring rot, identification, agglutination, immunodiffusion, diagnosis, *Solanum tuberosum* 8466.
 ring rot, light intensity effects on, *Solanum tuberosum* 7998.
 ring rot, media (culture), culture aging effects on pathogenicity, *Solanum tuberosum* 7999.
- Corynebacterium ulcerans**,
 identification, use, biochemical analysis 3316.
 toxins, characterization 3757.
- Coryneforms**,
 identification, milk, heating, refrigeration 6998.
 raton stunt, *Saccharum officinale*, characterization 3810.
 surfaces, interaction *Penicillium camemberti*, role aroma compounds, ripening, Camembert cheese 6186.
- Corynespora cassicola**,
 leaf blight, India, *Carica papaya* 6254.
- Corynetoxins**,
 association, tunicamycins, streptoviridins, structure, biological activity 523.
- Cow's milk**,
 food contamination, aflatoxin M1 7892.

Subject Index

- Cow's milk, (continued)**
 penicillin detection, *Bacillus stearothermophilus* agar diffusion test 7437.
 penicillin, quinaldofur, antibacterial activity, *Staphylococcus*, *Streptococcus*,
 correlation, mastitis, disease control, cattle 5773.
 transmission, mycotoxins, reviews 7075.
 Yersinia incidence, yersiniosis epidemiology, man, Japan 7007.
- Cosmetics,**
 microorganisms biodegradation, books 1683.
 microorganisms contamination 5751.
 preservation, hygiene 7397.
 preservatives 1367.
 production, environmental hygiene, quality control 8426.
- Cosmids,**
 hydrogen uptake, optimization, nitrogen fixation, *Bradyrhizobium japonicum* 8996.
- Cotinos,**
 seed-borne fungi, seed-borne diseases, seed treatments, mancozeb 8142.
 seeds infection, *Curvularia*, *Alternaria alternata* 8829.
- Cost-benefit analysis,**
 dairy starters, lactic acid bacteria 4464.
 dental sealants, dental caries prophylaxis, man 6724.
 indole test, identification, *Escherichia coli* 6787.
 salmonellosis, milk contamination, man 4449.
- Cotoneaster,**
 host plants, fireblight, reviews 7166.
- Cotrimoxazole,**
 antibacterial activity, antibiotic synergism, pharmacokinetics, reviews 5731.
 antibacterial activity, *Bacteroides fragilis* clinical isolates 8301.
 antibacterial activity comparison, lidaprim 8299.
 antibacterial activity, dose-response effects 7363.
 antibiotic sensitivity testing, *Branhamella catarrhalis* 9163.
 antibiotic sensitivity testing, *Escherichia coli* 7440.
 antibiotic sensitivity testing, *Streptococcus faecalis* 4808.
 antibiotic sensitivity testing, *Streptococcus pneumoniae* 6503.
 antibiotic synergism, imipenem, amikacin, *Nocardia asteroides* 480.
 +carbenicillin + rifampicin, antibiotic synergism, *Pseudomonas maltophilia* 3091.
 containing agar, association, *Streptococcus group A* isolation 1666.
 drug resistance, clinical isolates, *Shigella sonnei* 5710.
 drug resistance, gram-negative bacteria, isolation, food, Mexico 437.
 drug sensitivity testing, *Branhamella catarrhalis* 9087.
 drug sensitivity testing, Enterobacteriaceae, methodology 7371.
 drug sensitivity testing, media (culture), bacteria 2217.
 leukocytes (polymorphonuclear) penetration, antibacterial activity, man 492.
 Mycobacterium sensitivity 3045.
 resistance, *Shigella flexneri* 6425.
 synergism, metronidazole, tinidazole, antibacterial activity, anaerobic bacteria 7366.
- Cotton,**
 lignocelluloses, ginning, industrial wastes, textile industry, biodegradation,
Pyroporum cinnabarinus 6164.
- Cottonseed,**
 contamination, *Aspergillus niger* isolates, naphtho- γ -pyrone biosynthesis 6105.
 meals, *Aspergillus flavus* aflatoxins production 3746.
- Cotyledons,**
Bradyrhizobium japonicum nodulation, light inhibition, Glycine max 8248.
 Lycopersicon esculentum, lesions, *Corynebacterium michiganense*
 subsp. *michiganense*, identification, plant diseases 1158.
- Coulomb force,**
 use, immobilization, *Rhizopus exo-1,4- α -D-glucosidase* 39.
- Coumarin,**
 volatiles biosynthesis, association odors, *Pleurotus euosmus* 133.
- Coumestrol,**
 antibiotic sensitivity testing, gram-negative bacteria, gram-positive bacteria,
 antibiotic synergism, hydroxy quinolones 6557.
 antiviral activity, replication, influenza A virus 9112.
- Coumestrol A,**
 inhibition, retrovirus, replication, cell culture 9126.
- Counter immunoelectrophoresis,**
 adenovirus (human) 5, hexons antibodies, immunodiagnosis 2439.
 comparison, agglutination, Gram stain, diagnosis, meningitis, *Haemophilus*
influenzae type b, *Streptococcus pneumoniae*, man 3275.
 comparison agglutination, *Streptococcus pneumoniae* serotyping 3312.
 comparison, enzyme-linked immunosorbent assay, sensitivity, specificity,
hepatitis B surface antigen 7568.
 correlation, fluorescent antibody test, rabies virus antibodies determination,
 rabbits 3250.
 detection, bacteria antigens, cerebrospinal fluid, comparison agglutination 2483.
 detection, canine distemper virus, dogs 598.
 detection, rotavirus (human), feces, man 641.
 diagnosis, *Streptococcus pneumoniae* infection, comparison latex agglutination
 5028.
 immunodiagnosis, Legionnaire's disease, *Legionella pneumophila* antibodies 2478.
 immunodiagnosis, meningitis, *Neisseria meningitidis*, *Streptococcus pneumoniae*,
Haemophilus 2488.
 methodology, detection, antibodies, vesicular stomatitis virus 7569.
 methodology, infectious pancreatic necrosis virus identification 7563.
 methodology, Mycoplasma identification, mycoplasmosis immunodiagnosis, cattle
 6773.
 rotavirus detection, comparison, enzyme immunoassay, electron microscopy 4980.
 toxigenicity, *Corynebacterium diphtheriae* 7900.
- Coupling factor 1,**
 magnesium, cadmium complex, reaction mechanisms, structure, thermophilic bacteria 895.
 mutation effects on activity, *Escherichia coli* 898.
 subunits oxidative phosphorylation, characterization, comparison, *Escherichia*
coli, *Salmonella typhimurium* 3440.
 subunits, stoichiometry, use monoclonal antibodies, immunoelectron microscopy,
Escherichia coli 3479.
- p-Coumaric acid,**
 phytotoxicity, *Pseudomonas*, *Synechocystis* racemosus degradation effects on,
 allelopathy, *Triticum aestivum* 373.
- Cowpea aphid-borne mosaic virus,**
 disease transmission, *Aphis craccivora* vectors, *Vigna unguiculata* infestation
- Cowpea aphid-borne mosaic virus, (continued)**
 resistance 7137.
- Cowpea banding mosaic virus,**
 disease control, *Vigna unguiculata*, heat treatments, seed treatments 2095.
- Cowpea chlorotic mottle virus,**
 antiviral agents, effects on 4024.
 infection, incidence, *Vigna unguiculata*, USA, South Carolina 8777.
 infection *Vigna sinensis*, RNA polymerase (RNA-dependent) activity 4508.
 infectivity, symptoms, *Vigna unguiculata*, antiviral agents foliar applications
 effects on 3503.
- Cowpea mottle virus,**
 plant diseases, Glycine max, ultrastructure, leaves cells 4505.
- Cowpea mild mottle virus,**
 plant diseases, *Arachis hypogaea*, epidemiology 6235.
- Cowpea mosaic virus,**
 incidence, population density, seasonal variations, vectors, *Bemisia tabaci*,
Vigna unguiculata, *Phaseolus lunatus* 3783.
 infection, dark effects on susceptibility, *Vigna sinensis* 6223.
 infectivity, *Bemisia tabaci* vectors, *Vigna unguiculata* 3784.
 interaction, *Vigna unguiculata* protoplasts 247.
- Cowpea severe mosaic virus,**
 bud blight, Glycine max, Brazil 6228.
 infection, incidence, *Vigna unguiculata*, USA, South Carolina 8777.
 serotypes, plant diseases, *Vigna unguiculata* 6224.
- Coxiella burnetii,**
 Q fever, immunodiagnosis, immunoglobulin G, enzyme-linked immunosorbent assay
 man 2496.
- Coxsackievirus,**
 water pollution, rivers, Japan 8423.
- Coxsackievirus A24,**
 antiviral activity, antibodies + interferon, conjunctiva cell culture, man 2227.
- Coxsackievirus A9,**
 levels, measuring techniques, drinking water, waste water, lakes, marine
 environment 7532.
- Coxsackievirus B,**
 antibody response, immunoglobulin G, specificity, enzyme-linked immunosorbent
 assay 2438.
 isolation, GMK cells, clinical isolates 612.
 levels, detection methodology, surface water, drinking water, reviews 2384.
 water quality, rivers, sewage effluents 9254.
- Coxsackievirus B1,**
 levels, measuring techniques, drinking water, waste water, lakes, marine
 environment 7532.
- Coxsackievirus B2,**
 lyocine effects on 4021.
- Coxsackievirus B3,**
 DNA, use, enterovirus detection, nucleic acids hybridization analysis 4979.
- Coxsackievirus B4,**
 analogs antiviral activity 4772.
- Coxsackievirus B5,**
 seroepidemiology, occupational exposure, waste water, sprays, agriculture, man
 4096.
- Crasostrea gigas,**
 shells, minerals, bacteria, biodegradation 4439.
- Crasostrea virginica,**
 seafood, spoilage, aerobic bacteria, anaerobic bacteria, pasteurization,
 packaging, cold storage, shelf life 8720.
 seafood, steam pasteurization, freezing, *Clostridium botulinum* type E toxins
 production, spoilage 5364.
 Vibrio cholerae contamination, isolation methodology 5088.
- Cratogeomys monogyna,**
 host plants, fireblight, reviews 7166.
- Cream,**
 lactic acid production, growth, measuring techniques, *Streptococcus cremoris*
 7867.
 production, *Streptococcus lactis*, dairy starters, flavorings effects on, milk,
 buffaloes 2736.
- Creatine,**
 electrodes, creatinase, creatinase, sarcosine oxidase, immobilized enzymes,
Pseudomonas, *Corynebacterium* 89.
- Creatininase,**
 immobilized enzymes, *Pseudomonas*, electrodes, creatine 89.
- Creatinine,**
 determination, electrodes, immobilized enzymes creatinine deiminase + nitrifying
 bacteria immobilized cells 1605.
 electrodes, creatinase, creatinase, sarcosine oxidase, immobilized enzymes,
Pseudomonas, *Corynebacterium* 89.
- Creatinine deiminase,**
 immobilized enzymes, + nitrifying bacteria immobilized cells, electrodes,
 creatinine determination 1605.
- Creosol,**
 effects on *Aspergillus flavus* aflatoxin B1 biosynthesis, in vitro 7095.
- Creosote,**
 aquifers contamination, biodegradation, methanogenic bacteria, *Pseudomonas*
stutzeri 5815.
 effects on, catalase, activity, relationship, microorganisms, colonization,
 biodegradation, forest products 1243.
- m-Creosol,**
 estuaries, effects on *Escherichia coli*, phenotypes, genotypes 4961.
- p-Creosol,**
 biodegradation enzymes, *Alcaligenes eutrophus* 4422.
- Cronartium complanata,**
 rust, epidemiology, host-pathogen interactions, host alternation, *Comptonia*
pergrina, *Pinus banksiana* 5602.
- Cronartium flaccidum,**
 basidiospores spore germination, fluorescence brighteners effects on 2529.
 blister rust, plant breeding, disease resistance, *Pinus* 2870.
 sporulation, teliospores, urediniospores, environmental factors effects on,
Vincetoxicum officinale 3927.
- Cronartium quercum,**
 fusiform rust, *Pinus elliotii*, pathogenesis 4615.
- Cronartium quercum f.sp. banksianae,**
 rust, disease control, use, 2-iodobenzenzidine, benomyl, *Pinus* 3916.
- Cronartium quercum f.sp. fusiforme,**
 fusiform rust, disease resistance, density effects on, *Pinus elliotii* 8187.
 fusiform rust, disease resistance, necrosis ultrastructure, embryos, *Pinus taeda*

- Cronartium quercuum f.sp.fusiforme, (continued)**
362.
fusiform rust, disease resistance, seedlings, *Pinus elliptici* 2921.
fusiform rust, *Pinus elliptici* var. *elliottii* seedlings, stems lesions 7234.
fusiform rust, *Pinus taeda*, *Pinus elliptici* var. *elliottii*, pathology location, relationship, yield 8943.
infection susceptibility, *Pinus echinata* seedlings 5591.
inoculum phenology, *Pinus elliptici* var. *elliottii* fusiform rust 3921.
- Cronartium ribicola,**
blister rust, *Pinus monticola*, disease resistance 5595.
blister rust, +roots plant diseases pathogens, association, *Dendroctonus ponderosae*, *Phytophthora cossifrons*, *Pinus monticola*, USA, Idaho 8182.
strains, virulence, rust, disease resistance, *Pinus monticola*, USA, Oregon 8949.
- Crop fields,**
agriculture, nitrogen fixation, microorganisms 9345.
crop production (no-tillage), fallow land, soil microorganisms, mineralization, nutrient cycles, *Triticum aestivum* 5668.
crop production (no-tillage), soil microorganisms, biomass, nitrogen cycle, nutrient dynamics, *Triticum aestivum* 5669.
denitrification, agricultural practices, reviews 5671.
denitrification, gas production, nitrogen nitrous oxide ratio, *Hordeum vulgare* 5672.
fumigation, effects on soil microorganisms 5681.
Hordeum vulgare, planting density, relationship barley yellow dwarf virus incidence 256.
nitrogen fixation, *Rhizobium*, nitrogen-15, measuring techniques, *Glycine max* 7289.
nitrogen fixation, soil microorganisms, measuring techniques 1277.
organic matter biodegradation, soil microorganisms 1285.
organic matter, nutrient dynamics, nutrient cycles, soil microorganisms 5637.
phytopathogenic fungi spores, wind dispersal, modelling, *Hordeum vulgare* 5403.
plant diseases, yield reduction, predictions, measuring techniques, mathematical models, crop fields 239.
Sclerotium rolfsii stem rot, *Arachis hypogaea*, spatial distribution, USA, North Carolina 7134.
soil amendment, manure, drainage, indicator species, microbial pollution 6709.
soil microorganisms, phosphorus cycle 5635.
soil, vesicular-arbuscular mycorrhizas inoculation, field trials 7253.
Solanum tuberosum, potato virus S transmission, cutting instruments 8008.
Triticum aestivum, population levels, mycoflora, relationship *Aphelenchus avenae* 8223.
Triticum aestivum, trifluralin effects on population levels, soil microorganisms 5682.
waste water, irrigation, soil properties, bacteria, characterization 4924.
- Crop production,**
Cajanus cajan diseases, economic importance, Asia, Africa, North America, South America 7139.
- Crop production (no-tillage),**
crop fields, soil microorganisms, biomass, nitrogen cycle, nutrient dynamics, *Triticum aestivum* 5669.
crop fields, soil microorganisms, mineralization, nutrient cycles, *Triticum aestivum* 5668.
- Crop protection,**
biological control, books 8494.
plant breeding, disease resistance, tropical environment, long-term effects 1177.
- Crop residues,**
Agave fourcroydes, single-cell protein production, gram-negative bacteria 3415.
biodegradation, symbiosis activity, *Bacillus polymyxa*, *Penicillium* 3673.
Cochliobolus sativus sporulation, overwintering, soil 5420.
Jocosa, cellulase hydrolysis, cellulase, *Trichoderma reesei* 8678.
control, disease control, phytopathogenic fungi 2842.
conversion, use cellulolytic enzymes, pectinolytic enzymes, microorganisms, silage, fermentation 213.
decomposition, soil microorganisms, hydraulics effects on percolation 7509.
digestion (anaerobic), phytoxicity reduction, soil microorganisms decomposition, *Hordeum distichon* 2936.
disease reservoirs, *Fusarium graminearum*, overwintering, stalk rot, USA, Minnesota, Zea mays 7967.
disease reservoirs, soil-borne diseases, *Corynebacterium michiganense* subsp. *michiganense*, canker, *Lycopodium esculentum* 8872.
ethanol production, cellulolytic microorganisms 3637.
fermentation, ethanol production, immobilized cells, *Saccharomyces* 3641.
fermentation, methane production, reviews, microorganisms 5703.
fermentation, pretreatment, production, carbohydrates, ethanol 5307.
fermentation, production, butanol, acetone, *Clostridium acetobutylicum* 7832.
Hordeum vulgare, Medicago sativa, smoke, antifungal activity, fungi 8319.
lignocelluloses, digestion (anaerobic), methanogenesis 5696.
lignocelluloses fermentation, ethanol production, *Saccharomyces cerevisiae* 5292.
lignocelluloses, high pressure carbon dioxide + steam pretreatment, cellulase hydrolysis 1748.
Malus, fermentation, ethanol production 3623.
Medicago littoralis, soil amendment, decomposition, soil microorganisms 5685.
Musa paradisica, substrates, single-cell protein production, *Pichia spartanea* 863.
organic acids production, energy resources, digestion (anaerobic), *Trichoderma reesei* 3417.
Oryza sativa, sewage sludge, composting, actinomycetes, aerobic bacteria, cellulolytic bacteria 7492.
proteins hydrolysis, immobilized enzymes, proteinase, bioreactors, *Penicillium duponti* 3475.
radiation + chemicals pretreatment, effects on enzymes hydrolysis 1044.
Saccharum officinale, fermentation, continuous culture, *Candida utilis* + *Paeclomyces variotii* 3666.
silage + whey, *Lactobacillus plantarum* inoculation, *Gossypium nirsutum* 2743.
single-cell protein production, cellulolytic microorganisms 3726.
soil amendment, effects on population levels, soil microorganisms 5687.
soil amendment, *Macrophomina phaseolina* mycelia survival association 2133.
Zea mays, *Chaetomium cellulolyticum* fermentation, n-butylamine pretreatment 183.
Zea mays, coupling, β -D-fructofuranosidase, immobilization 8551.
Zea mays, lignin, biodegradation, *Trichosporon penicilliatum* 6950.
Zea mays, silage, fermentation, effects on digestibility, cattle 7877.
- Crop rotation,**
disease control, *Peronosclerospora sorghi* downy mildew, *Sorghum bicolor*: 1175.
disease resistance, *Arachis hypogaea*, *Cylindrocylindrium crotalariae* black rot 5490.
- Crop rotation, (continued)**
Gossypium hirsutum, *Vetillium dahliae* pathogenicity, soil-borne diseases association 1149.
soil microorganisms 2140.
Zea mays, *Triticum aestivum*, herbicides effects on soil microorganisms 2929.
- Crops,**
disease control, soil amendment, sewage sludge composts, fungi 5488.
disease resistance plant breeding 8893.
horticulture, disease resistance, *Dermatophora necatrix* root rot 2073.
host range, *Pseudomonas solanacearum*, wilt 7177.
Leguminosae, endomycorrhizas, India 7251.
mycorrhizas, research programs, technology 5649.
nitrogen fixation, soil microorganisms 410.
nonhost, growth, soil, association, *Fusarium oxysporum* f.sp. *niveum* infestation, effects on levels 3626.
plant breeding, disease resistance 2875.
plant breeding, disease resistance, biometrics 2867.
plant breeding, disease resistance, epidemiology, host-pathogen interactions 2866.
plant breeding, disease resistance, host-pathogen interactions, genotype-environment interactions, reviews 2868.
plant breeding, disease resistance, phytopathogenic fungi, host-pathogen interactions, genotype-environment interactions 2865.
plant breeding, disease resistance, USA 2879.
plant diseases, viruses, control, ecological evaluation, reviews 3764.
plant diseases, weather projections 1098.
plant diseases, yield reduction 1092.
plant diseases, yield reduction, mathematical models, conferences 849.
plant viruses infection diagnosis, spot hybridization 7924.
roots colonization, phosphate, nutrient uptake, vesicular-arbuscular mycorrhizas 5620.
roots, nitrogen fixation, denitrification, flooded soils 2994.
soil fertility, allelopathy, role, soil microorganisms, phytooxins 4636.
yield, biotechnology, books, soil microorganisms 3366.
yield, foliar applications, nitrogen fixation, *Klebsiella* 2973.
yield, inoculation, mycorrhizas 1233.
yield reduction, plant diseases 1093.
yield reduction, plant diseases 1094.
- Cross-breeding,**
Vitis vinifera × *Muscadina rotundifolia* hybrids, phytoalexin resistance 3832.
- Crossed immunoelectrophoresis,**
parainfluenza virus 3 glycoproteins, resolution 8449.
- Crowding,**
larvae, *Culex pipiens molestus*, *Theobaldia longiareolata*, effects on *Bacillus thuringiensis* subsp. *israelensis* lethality 124.
- Crown gall,**
Agrobacterium, cell proliferation, host-parasite interactions, host plants 8855.
Agrobacterium tumefaciens, cell surface interaction, plant cells 8854.
Agrobacterium tumefaciens, disease control, salicylic acid, acetylsalicylic acid, *Nicotiana tabacum* 7217.
Agrobacterium tumefaciens, disease resistance, plant breeding, *Vitis amurensis* × *Vitis vinifera* 8906.
Agrobacterium tumefaciens, disease resistance, screening, plant breeding, inheritance, *Vitis amurensis* × *Vitis vinifera* 8906.
Agrobacterium tumefaciens, *Nicotiana rustica*, octopine biosynthesis detection 2808.
Agrobacterium tumefaciens, nopaline dehydrogenase, D-lysine dehydrogenase, activity, plants 6274.
Agrobacterium tumefaciens serotyping, rootstocks, *Malus pumila* 270.
Agrobacterium tumefaciens, trees, characterization 5583.
Agrobacterium tumefaciens, *Vitis vinifera* 279.
Agrobacterium, *Vitis vinifera*, epidemiology, Afghanistan 1151.
bioassays, *Malus pumila*, *Rosa rugosa*, host range, disease control 343.
biological control, Agrobacterium radiobacter, fruit trees, reviews 333.
biological control, Agrobacterium radiobacter, *Prunus persica* 334.
biological control, Agrobacterium radiobacter, *Prunus persica*, *Prunus amygdalis* 335.
biological control, fruit trees 269.
disease control, biological control, conferences 848.
disease control, sewage sludge, soil amendment, Rubus 310.
disease control, streptomycin, CGA 78039, rootstocks, *Malus pumila* 342.
fruit trees, British Isles 268.
fruit trees, Italy 267.
opines, mediation T1 plasmid, gene transfer, Agrobacterium tumefaciens, host plants 235.
plants, opines utilization, *Pseudomonas*, Agrobacterium tumefaciens 7131.
plants, silver nitrate staining tumors, Agrobacterium tumefaciens 4534.
tumors, asparaginopine, glutaminopine, isolation, Agrobacterium tumefaciens 2810.
tumors, indole-3-acetic acid treatment, *Solanum tuberosum* tubers 8874.
tumors, plants, induction, role, Agrobacterium tumefaciens cell surface carbohydrates 8768.
Vitis vinifera, etiology, Agrobacterium 3848.
- Crown rot,**
Limonium sinuatum, etiology, *Pseudomonas caryophylli* 4560.
Medicago sativa, disease control, benomyl, *Sclerotinia* 5527.
Phytophthora cactorum, *Bacillus subtilis* antagonism, biological control, seedlings, *Malus pumila* 7212.
Phytophthora cactorum, *Malus*, antagonists, bacteria, effects on pathogenesis 5511.
Phytophthora capsici, disease resistance, *Capsicum annuum* 5508.
Phytophthora, *Castanea sativa* disease control 3676.
Phytophthora, orchards, *Juglans regia* 271.
Sclerotinia triflorum, disease resistance, selection, Medicago sativa 5485.
- Crown rust,**
pathogenesis, *Avena byzantina* 7982.
Puccinia coronata, β -D-fructofuranosidase physicochemical properties, leaves, *Avena sativa* 2109.
Puccinia coronata, disease resistance, *Avena sterilis* 4577.
Puccinia coronata f.sp. *avenae*, disease resistance, genetic analysis, *Avena sativa* 3668.
- Cruculibum laeve,**
biodegradation, lignocelluloses, *Triticum aestivum*, *Acer saccharum* 6948.
- Cruciferae,**
black rot, epidemiology, etiology, Thailand 287.
- Cryopreservation,**
bacteria, methodology, reviews 744.

Cryopreservation, (continued)

- biospores, *Agaricus brunneus* 8696.
cell culture, yeasts 4222.
Escherichia coli phages, inactivation factors 1550.
nitrogen (liquid), biochemical characteristics, yeasts 6789.
nitrogen (liquid), *Leptospira* 9289.
nitrogen (liquid), *Leptospira pomona* 1615.
use inoculation, wastewater treatment 7600.
- Cryphonectria parasitica**,
virulence conversion, *Castanea dentata* isolates, blight biological control 6326.
virulence conversion, *Castanea dentata* isolates, blight biological control 6327.
- Cryptococcus tumefaciens**,
recovery methodology, kidney diseases, man 1633.
- Cryptococcus**,
antibiotic sensitivity testing, drug sensitivity testing 6346.
detection methodology, activity, L- α -aminocaprolactam hydrolase, lysine amidase 6822.
gem tubes detection, API test 2528.
lysine production, activity, L- α -aminocaprolactam hydrolase 6034.
synergism, *Uromyces viciae-fabae* infection, *Vicia faba* 7135.
- Cryptococcus albidus**,
endo-1,4- β -D-xylanase, cellobiose, xylosyl acceptors 3671.
lipids biosynthesis, growth rate, continuous culture 6925.
- Cryptococcus laurentii**,
polysaccharides biosynthesis 6054.
- Cryptococcus laurentii var. laurentii**,
food contamination, meat, effects on flavor, association freezing 3702.
- Cryptococcus neoformans**,
antifungal activity, 2-methylquinolines 5740.
analyses, detection, body fluids, methodology comparison, man 2531.
clinical isolates
1-(4-chlorophenoxy)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,
1-(4-chlorophenoxy)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,
antifungal activity 4756.
growth inhibition, ketoconazole, amphotericin B 1407.
indole compound utilization, melanin pigments biosynthesis 2645.
itraconazole antifungal activity, new records 9104.
phagocytosis, staining, (4',6'-diamidino-2-phenylindole)-fluorochrome, microscopy 2524.
- Cryptococcus neoformans var. gatii**,
media (selective) 809.
- Cryptococcus neoformans var. neoformans**,
media (selective) 809.
- Cryptosporidiosis quercina**,
Quercus robur branches 7218.
- Cryptosporidia corticale**,
strains compatibility, life cycle, epidemiology, population structure, sooty bark, *Acer pseudoplatanus* 8190.
- Crystal structure**,
lignocelluloses, γ radiation effects on 3654.
X-ray diffraction, DNA-binding protein, *Bacillus stearothermophilus* 7663.
X-ray diffraction, ribosomal protein L6, *Bacillus stearothermophilus* 7662.
- Crystallization**,
serine phosphatase binding sites, *Escherichia coli* 2587.
20 α -hydroxysteroid dehydrogenase, X-ray diffraction, *Streptomyces hydrogenans* 6834.
- Crystals**,
protein, *Bacillus thuringiensis* subsp. *israelensis*, solubilization methodology, toxicity, *Aedes aegypti* larvae 1859.

Ctenocephalides felis,

- repellents, efficacy, *Saccharomyces carlsbergensis*, dogs 6092.
- Cucumber green mottle mosaic virus**,
disease transmission, *Raphidopalpa foveicollis*, vectors, *Lagenaria siceraria*,
Cucurbita pepo 8850.

Cucumber mosaic virus,

- Ampelopsis proflera*, leaves, extracts, antiviral activity 8333.
antiviral activity, ribavirin, petioles tissue culture, *Nicotiana tabacum* 3904.
detection, *Arachis hypogaea*, China, People's Rep. 6229.
disease resistance, plant breeding, *Nicotiana tabacum*, Taiwan 5480.
immunodiffusion, detection, *Nicotiana tabacum*, sap 8822.
incidence, *Cucumis sativus*, mulches, effects on 4585.
infection, *Cucurbita pepo*, leaves symptoms 6259.
infection, incidence, *Vigna unguiculata*, USA, South Carolina 8777.
infection, *Medicago sativa*, etiology, disease transmission 2787.
isolation, *Olea europaea*, Italy 6248.
mosaic disease, host range, disease transmission, *Cucumis melo* 8819.
plant diseases, *Pisum sativum*, amino acid composition 6227.

Cucumbers,

- fermentation, lactic acid bacteria 5330.
microorganisms contamination, chlorine dioxide control 8051.

Cucumis,

- Didymella bryoniae* stem blight, benzimidazoles, resistance 1223.
host range, papaya ringspot virus, comparison, watermelon mosaic virus 1 8039.
Phytophthora drechsleri blight, China, People's Rep. 7170.

Cucumis melo,

- epidemiology, *Bemisia tabaci*, disease transmission, watermelon mosaic virus 2,
squash mosaic virus, USA, California 3921.
germplasm, disease resistance, *Fusarium oxysporum* f.sp. *melonis* infection 313.
Macrophomina phaseolina charcoal rot, pathogenesis 2033.
mosaic disease, cucumber mosaic virus, host range, disease transmission 8819.
plant breeding, disease resistance, plant viruses 3856.
seed-borne diseases, transmission (seed), *Didymella bryoniae* 8036.
zucchini yellow mosaic virus disease resistance, inheritance, zym gene, linkage analysis 5478.

Cucumis sativa,

- cotylenoids, tobacco necrosis virus infection, proteins fraction characterization 1143.
light intensity, pathogenesis, *arabis* mosaic virus 2009.
powdery mildew, *Erysiphe cichoracearum*, *Sphaerotheca fuliginea*, Czechoslovakia 3836.
- Cucumis sativus**,
disease control, *Phytophthora infestans*, *Pseudoperonospora cubensis*,
cross-resistance, fungicides, metalaxyl 2894.
disease resistance, *Cladosporium cucumerinum*, cell walls hydroxyproline levels,

Cucumis sativus, (continued)

- lignin deposition 7205.
downy mildew, disease control, salicylanilides derivatives 8315.
downy mildew, powdery mildew, disease control, antibiotics-copper sulfate 8139.
downy mildew, *Pseudoperonospora cubensis*, metalaxyl resistance, strains competition 341.
fruit rot, stem rot, *Didymella bryoniae* ascospores incidence 278.
melon necrotic spot virus infection, disease control 6314.
mulches, effects on, cucumber mosaic virus, watermelon mosaic virus, incidence 4585.
plant diseases, watermelon mosaic virus, host range, disease transmission, *Monospora* 6270.
plant diseases, zucchini yellow mosaic virus, Lebanon 4544.
powdery mildew, *Erysiphe*, epidemiology, spectrophotometry 7917.
Pseudoperonospora cubensis, metalaxyl, resistance, strains, pathogenicity 4547.
scab, *Cladosporium cucumerinum*, seedlings, pathogenesis, role, protease 7178.
seed-borne diseases, transmission (seed), *Didymella bryoniae* 8036.
seeds, baiting substrates, disease reservoirs, soil-borne diseases, *Pythium aphanidermatum* 8763.
- Cucurbita**,
disease transmission, squash leaf curl virus, vector-borne diseases, *Bemisia tabaci*, characterization 1150.
- Cucurbita maxima**,
fruits, chemical composition, watermelon mosaic virus effects on 6257.
- Cucurbita moschata**,
downy mildew, *Pseudoperonospora cubensis*, oospores, incidence, India 8838.
- Cucurbita pepo**,
cucumber green mottle mosaic virus, disease transmission, vectors, *Raphidopalpa foveicollis* 8850.
cucumber mosaic virus infection, leaves symptoms 6259.
epidemiology, *Bemisia tabaci*, disease transmission, watermelon mosaic virus 2,
squash mosaic virus, USA, California 3821.
foliar application, oils, disease transmission, watermelon mosaic virus, *Myzus persicae* 6277.
leafspot, *Septoria cucurbitacearum*, new records, British Isles 5452.
Meloidogyne javanica infection, watermelon mosaic virus effects on 6266.
seed-borne diseases, transmission (seed), *Didymella bryoniae* 8036.
- Cucurbitaceae**,
plant diseases, hop stunt disease virus, pathogenesis 4543.
plant diseases, zucchini yellow mosaic virus, USA 6269.
- Botryodiplodia theobromae* seed rot 2032.
- Culex**,
biological control, microbiology, pathology, genetics, *Bacillus sphaericus* 6898.
- Culex annulirostris**,
biological control, pathogens, *Culiciniomyces clavosporus*, field trials, Australia 128.
- Culex declarator**,
larvae, biological control, *Bacillus thuringiensis* 136.
- Culex molestus**,
larvae, *Bacillus thuringiensis* toxicity, biological control 8647.
- Culex pipiens**,
Bacillus thuringiensis subsp. *israelensis*, biological control, Israel 2672.
Bacillus thuringiensis subsp. *israelensis*, biological control, Israel 3543.
biological control efficacy, suspended matter, turbidity, effects on, *Bacillus thuringiensis* var. *israelensis* 8642.
biological control, field trials, formulations, *Bacillus thuringiensis* subsp. *israelensis* 6916.
biological control, use pathogens, *Coleomomyces psorophorae* 4395.
larvae, biological control, *Bacillus sphaericus*, sporulation, relationship, toxicity 6089.
larvae, toxicity, α -endotoxin, spore crystals, *Bacillus sphaericus* 3572.
larvicides activity, *Bacillus sphaericus* media (culture), growth, sporulation 127.
- Culex pipiens molestus**,
larvae, crowding effects on *Bacillus thuringiensis* subsp. *israelensis* lethality 124.
- Culex pipiens quinquefasciatus**,
pathogenicity, *Entomophthora culicis* 138.
- Culex quinquefasciatus**,
biological control, spores powder, *Bacillus thuringiensis*, *Bacillus sphaericus* 6918.
larvae, biological control, pathogenicity, phage typing, *Bacillus sphaericus* 2683.
larvae, biological control, toxicity, *Bacillus thuringiensis*, *Bacillus sphaericus*, pollution effects, fresh water 2658.
- Culex tarsalis**,
biological control, larvicides, *Bacillus sphaericus* spores, fate, ponds 1845.
- Culticide**,
Bacillus thuringiensis subsp. *israelensis* proteins toxicity association, isolation, characterization 1733.
Bacillus thuringiensis subsp. *israelensis* toxins biological control, toxicity 7790.
biological control, *Bacillus thuringiensis* subsp. *israelensis*, field trials 1854.
biological control, efficacy, persistence, ponds, *Bacillus sphaericus* 6917.
biological control, *Leguminosae* giganteum, pathogens, aquatic environment 130.
biological control, pathogenicity, *Bacillus thuringiensis* 6085.
biological control, pathogens, predator-prey interactions, *Bacillus sphaericus*, *Bacillus thuringiensis*, *Toxothrypanus* 1841.
biological control, persistence, recycling, growth, *Bacillus sphaericus* 6920.
biological control, sporulation, *Bacillus sphaericus*, transformation, plasmid pB110, plasmid pBC16 2666.
biological control, use pathogens, *Coleomomyces psorophorae* 4395.
cell lines, growth, African swine fever virus 1545.
fungi pathogenicity 138.
larvae, bioassays, biological control efficacy, *Bacillus thuringiensis* 6083.
larvae, biological control, spore crystals, *Bacillus sphaericus* 6917.
larvicides, *Streptosporangium albidum* aculeximin, fermentation, isolation 2293.
- Culiciniomyces clavosporus**,
biological control, dose-response effects, mortality, *Aedes aegypti* 6911.
biological control, dose-response effects, mortality, larvae, *Anopheles hillii* 2654.
infection, histopathology, ultrastructure, digestive tract, biological control, larvae, *Anopheles* 2653.
- Culiciniomyces clavosporus**,
pathogens, biological control, *Culex annulirostris*, field trials, Australia 126.

- ulicoides**,
biological control, *Bacillus thuringiensis* 3573.
- ulture collections**,
bacteria, plasmids, genetic markers, computer programs 756.
fungi, preservation methodology 2526.
patients, brewing, microorganisms 6342.
viruses, media (transport) methodology 2442.
- ulture systems**,
Aeromonas hydrophila population levels, aquaculture, *Ictalurus punctatus* 6707.
ectomycorrhizas colonization, roots, seedlings, *Pinus* 7637.
microorganisms, gases determination, mass spectroscopy methodology 4144.
urhinghamella echinulata,
antifungal activity, chromium(III), chromium(VI) 8316.
nicotine biodegradation 1890.
tn, antifungal activity 1341.
- urtinghamella elegans**,
biodegradation, 1-fluoronaphthalene, stereoselectivity 7835.
7,12-dimethylbenz[a]anthracene metabolism, metabolites analysis 424.
hydroxylation, 1-methylnaphthalene, 2-methylnaphthalene 2167.
oxidation, stereoselectivity, phenanthrene, anthracene 2188.
- urpic hydroxide**,
disease control, *Hemelia vastatrix*, leaf rust, *Coffea* 8123.
+ mancozeb, disease control, bacteria speck, *Lycopersicon esculentum* 6310.
- urpous oxide**,
disease control, *Hemelia vastatrix*, leaf rust, *Coffea* 8123.
disease control, *Theobroma cacao*, pod rot, *Phytophthora palmivora* 5526.
- urcullo caryeae**,
biological control, disease reservoirs, soil colonization, *Beauveria bassiana*,
antiphenol anisopliae 5263.
- urcurbita moschata**,
plant breeding, inheritance, disease resistance, host-pathogen interactions,
powdery mildew, *Erysiphe cichoracearum* 3862.
- urid**,
soybean milk, *Penicillium caseicola* fermentation, bromelain coagulants 7852.
- ured products**,
meat products, food processing, spoilage, contamination, bacteria 3708.
poultry, spoilage, preservatives, sodium nitrite, sodium ascorbate 7886.
- urvularia**,
cellulolytic enzymes activity 6871.
infection, seeds, *Cosmos* 8829.
- urvularia intermedia**,
biodegradation, polyvinyl chloride, films 1032.
- urvularia lunata**,
antimicrobial activity, nematocides 1325.
hydrogenase, reduction, bicyclo[3.2.0]hept-2-en-6-one 5255.
Immobilized cells, hydrocarbons production 107.
infection, *Zea mays* seeds, climatic conditions 1992.
mancozeb+curzate antifungal activity 2065.
Streptomyces amycini antifungal activity 4869.
- urvularia pallidescens**,
infection, *Zea mays* seeds, climatic conditions 1992.
- urvularia tuberculata**,
leafspot, *Eichhornia crassipes* 8818.
- urvularia verruciformis**,
antifungal activity,
3-arylaminoethyl-5-(2,4-dichlorophenyl)-1,3,4-oxadiazole-2-thione,
3-arylarylalkyl-5-(2,4-dichlorophenyl)-1,3,4-oxadiazole-2-thione, derivatives
5521.
- urvae**,
+ mancozeb antifungal activity, phytopathogenic fungi 2085.
- urtele**,
Phaseolus vulgaris, role disease resistance, *Rhizoctonia solani* 1174.
- urting**,
instruments, potato virus S transmission, *Solanum tuberosum*, greenhouses, crop
fields 8008.
- urting fluids**,
biodegradation, activated sludge reactors, bacteria identification 178.
- urmpoplia tetragonoloba**,
nitrogen fixation, nitrogenase activity, nodulation, water stress effects on
4670.
powdery mildew, *Leveillula taurica*, incidence, USA, Arizona 8035.
symptoms, *Rhizobium*, phenotypes, variability 8246.
- urnamide**,
disease control, plants, seedlings, infection, *Rhizoctonia solani*, *Pithium*
debaryanum 3866.
- uramide**,
binding cytochrome peroxidase, E.S.R., *Pseudomonas aeruginosa* 3469.
biodegradation, *Pseudomonas fluorescens* growth, nitrogen sources, ammonia
biosynthesis 1877.
industrial effluents, toxicity, methanogenic bacteria, digestion (anaerobic)
2376.
- urano-D-alanine**,
inactivation, D-alanine aminotransferase activity, temperature role, *Bacillus*
spheerius 7717.
- uranoalanine synthase**,
purification, characterization, *Chromobacterium violaceum* 6044.
- urancobalamine**,
bioassays, use bialaphos, streptomycetes hygroscopicus 5905.
biosynthesis, methanogenic bacteria 963.
biosynthesis, *Propionibacterium shermanii*, *Propionibacterium*, amino acids,
betaine, choline, effects on 146.
biosynthesis, 5-aminolevulinic synthase, mediation, betaine stimulation,
Pseudomonas denitrificans 6094.
like compounds, corninoids, tetrapyrroles, biosynthesis, *Clostridium* 7779.
production, betaine, stimulation, *Pseudomonas denitrificans*, association, protein
biosynthesis 4401.
production, *Corynebacterium* 2641.
production, growth conditions, optimization, *Propionibacterium freudenreichii*
subsp. *shermanii* 2669.
production, *Propionibacterium*, *Propionibacterium shermanii*, fermentation, why
145.
- urancocycline A**,
derivatives, antitumor activity, antimicrobial activity, *Streptomyces*
- Cyanocycline A**, (continued)
flavogriseus 2640.
inhibition, nucleic acids biosynthesis, antitumor activity, antibacterial
activity, *Escherichia coli* 1430.
- Cyenthus**,
lignin biodegradation, straw 3653.
- Cyanuric acid**,
biodegradation, soil microorganisms 1894.
- Cyathus**,
biodegradation, lignocelluloses, *Triticum aestivum*, *Acer saccharinum* 6948.
- Cyclamen persicum**,
soft rot, *Erwinia carotovora* subsp. *carotovora* isolation, pathogenicity 3843.
- Cyclic AMP**,
dependent protein kinase, phosphorylation yeasts phosphorylase, comparison
phosphorylase kinase 896.
levels, *Phytophthora megasperma* f.sp. *glycinea* infection, Glycine max 2782.
regulation, biosynthesis, 1,4- β -D-xylanase, 1,3- β -D-glucanase,
1,6- β -D-glucanase, *Bacillus circulans* 6036.
- 3':5'-Cyclic-nucleotide phosphodiesterase**,
activity, calmodulin stimulation, *Neurospora crassa* 2583.
Dicyostelium discoideum, characterization 2590.
inhibitors, terferol production, *Streptomyces showdoensis* 3567.
inhibitors, terferol, structure, *Streptomyces showdoensis* 3585.
Vibrio harveyi, thin-layer chromatography 3279.
- 3 α ,5 α -Cyclocholestan-6 β -ol isomerase**,
purification, characterization, *Moraxella* 5196.
- Cyclodextrinase**,
purification, characterization, *Bacillus coagulans* 1785.
- Cycloheximide**,
treatment McCoy cells, + periodic-acid-Schiff stain, use, diagnosis isolation,
Chlamydia trachomatis 3294.
- Cyclohexone**,
reduction, *Clostridium* growth 1881.
- Cyclomaltoextrin glucanotransferase**,
immobilization, characterization, *Bacillus* 5191.
Klebsiella pneumoniae, use, preparation, cyclooctamylase, methodology 6753.
production, alkalophilic bacteria 7679.
- Cyclooctamylase**,
preparation, use, cyclomaltoextrin glucanotransferase, *Klebsiella pneumoniae*,
methodology 6753.
- Cyclopaldic acid**,
isolation, *Aspergillus ustus*, N.M.R., characterization 6803.
- Cycloplazonic acid**,
production, *Aspergillus tamarii* 221.
- α -Cycloplazonic acid**,
production, *Penicillium*, *Aspergillus* 5370.
- Cycloserine**,
Nocardia asteroides antibiotic sensitivity testing 3090.
inhibition 3-ketodihydroshingosine synthetase, *Bacteroides livii* 7472.
- Cyclosporin A**,
antifungal activity, *Coccidioides immitis* 1339.
antifungal activity, yeasts 8312.
antiviral activity, replication, poliovirus 2, cytomegalovirus (murine),
vesicular stomatitis virus, cell culture 6330.
biosynthesis pathway, *Tolypocladium inflatum* 7780.
Tolypocladium inflatum, synthesis 8625.
- Cyclosporin H**,
Tolypocladium inflatum, synthesis 8625.
- Cydia pomonella**,
biological control, granulosis virus, effects on nontarget organisms, orchards
4387.
biological control, pest control, field trials, granulosis virus 4388.
isolates, granulosis virus, use, pest control, *Rhyacionia frustrana* 6892.
- Cydonia**,
host plants, fireblight, reviews 7166.
- Cylindrocarpum**,
root rot, benomyl, PCNB, *Ficus benjamina* 8916.
- Cylindrocaphalum**,
rot, *Phaseolus aureus* 5409.
- Cylindrocladium**,
isolation, *Rumohra adiantiformis* 5467.
plant disease, *Eucalyptus*, incidence, greenhouses 8942.
- Cylindrocladium crotalariae**,
black rot, *Arachis hypogaea*, crop rotation effects on disease resistance 5490.
black rot, disease resistance, *Arachis hypogaea* 8105.
black rot, fertilizer applications effects on, *Arachis hypogaea* 8772.
black rot, virulence, *Arachis hypogaea* genotypes comparison, plant breeding 8084.
black rot, yield reduction, mathematical models, *Arachis hypogaea* 242.
black rot disease resistance plant breeding, *Arachis hypogaea* 1171.
root rot, factors affecting, pathogenesis, *Arachis hypogaea* 7942.
- Cylindrocladium heptaseptatum**,
post-harvest decay, prevention, benomyl, cold storage, *Rumohra adiantiformis*
8128.
- Cylindrocladium lilicola**,
lilicolin H, biosynthesis, structure 6567.
- Cylindrocladium pteridis**,
post-harvest decay, prevention, benomyl, cold storage, *Rumohra adiantiformis*
8128.
- Cylindrocladium scoparium**,
stem canker, *Eucalyptus grandis* seedlings, disease control 8324.
- Cymbidium**,
infection, cytopathology, *Odontoglossum ringspot virus*, *Cymbidium* mosaic virus
3823.
- Cymbidium mosaic virus**,
infection, cytopathology, *Cymbidium* 3823.
- Cynodon dactylon**,
stunt, *Clavibacter* gen.nov. isolates, characterization 6240.
- Cynodon dactylon**,
pathogenicity, *Rhizoctonia solani*, USA, North Carolina 3802.
white rot, detritus effects on pathogenesis, fungi 8785.
- Cynometra**,
bark, nitrogen-fixing bacteria activity 8147.
- Cyperus secutus**,
Puccinia canaliculata, biological control, characterization 1848.

Cypress

plant breeding, disease resistance, canker, *Seiridium cardinale* 2870.

Cyprinus carpio

organs, spring viremia of carp virus antigens detection, immunoperoxidasetest, fluorescent antibody test 5888.

Cyprofuram

cross-resistance, metalaxyl, *Phytophthora infestans*, *Pseudoperonospora cubensis*, disease control, *Solanum tuberosum*, *Cucumis sativus* 2894.

Cystathionine γ -lyase

purification, methodology, characterization, reviews 4306.

Cysteine

residues characterization, heme binding cytochrome P-450, *Pseudomonas putida* 910. residues, chemical modification, sarcosine oxidase, *Corynebacterium* 12. residues, free radicals chemical modification, role, gene 32 protein binding, DNA, C.D., fluorescence, phage T4 4259.

L-Cysteine

synthesis, racemization, enzymes, bacteria 4.

Cytic fibrils

clinical isolates, antibiotic sensitivity testing, *Pseudomonas aeruginosa* 9179.

clinical isolates, *Pseudomonas aeruginosa*, *Pseudomonas cepacia*, children,

antibiotic sensitivity testing, amikacin, antibiotic synergism, aztreonam,

piperacillin, ticarcillin 3170.

sputum, bacteria quantification, media (selective) 7588.

Cytine

reduction, antagonist, lactoperoxidase, thiocyanate, hydrogen peroxide,

antibacterial activity, *Streptococcus agalactiae* 3056.

Cytarabine

incorporation, herpes simplex virus DNA, association, vidarabine drug resistance

3067.

Cytlaue scoparius

actinomycetis, silviculture, nutrient uptake, plantations, silviculture,

Pseudotsuga menziesii 8159.

Cytochrome b

reaction centers, purification, characterization, cell membranes, *Chlorobium*

limicola f.sp.thiosulfatophilum 4253.

Cytochrome b2

+cytochrome c complex, binding characterization, fluorescence, *Hansenula anomala*

861.

Cytochrome c

affinity, cytochrome c oxidase subunits, *Nitrobacter agilis* 5990.

amino acid composition, *Ustilago* 869.

CYC1 gene, cloning, yeasts 819.

+cytochrome b2 complex, binding characterization, fluorescence, *Hansenula anomala*

861.

Cytochrome c oxidase

electron transport, sodium azide effects on, fermentation optimization, ethanol

production, *Saccharomyces cerevisiae* 3624.

isolation, amino acid sequence, *Saccharococcus denitrificans*, homology mitochondria

897.

metals carbon, E.S.R., reviews, *Saccharomyces cerevisiae* 5180.

oxygen, carbon dioxide reaction mechanisms, kinetics, thermophilic bacteria 7755.

streptomycin uptake, effects on, *Bacillus subtilis* 9196.

subunits, cytochrome c affinity, *Nitrobacter agilis* 5990.

Cytochrome c 554

N.M.R., *Alcaligenes faecalis* 3439.

Cytochrome c1

purification, characterization, *Rhodospseudomonas sphaeroides* 3406.

Cytochrome c3

purification, methodology, *Desulfovibrio desulfuricans* 5163.

structure-activity relationships, redox properties, *Desulfovibrio* 5108.

Cytochrome c3 hydrogenase

secondary structure, X-ray crystallography, *Desulfovibrio vulgaris* 2625.

Cytochrome c550

N.M.R., *Paracoccus denitrificans* 7701.

Cytochrome c551

purification, characterization, electron transport chain, multienzyme complexes,

cell membranes, *Thiobacillus versutus* 7703.

Cytochrome c552

N.M.R., *Pseudomonas perfectomarinus* 7710.

Cytochrome c552.5

purification, characterization, electron transport chain, multienzyme complexes,

cell membranes, *Thiobacillus versutus* 7703.

Cytochrome c556

N.M.R., *Alcaligenes faecalis* 8520.

Cytochrome d

oxidation, sodium nitrate effects on, U.V. spectroscopy, *Escherichia coli* 2565.

redox potential, spectroscopy, *Escherichia coli* 4273.

Cytochrome P-448

activity, benz[a]pyrene hydroxylases dependent, *Saccharomyces cerevisiae* 5132.

Cytochrome P-450

amino acid sequence, *Pseudomonas putida* 6000.

heme binding, characterization cysteine residues, *Pseudomonas putida* 910.

Saccharomyces cerevisiae, role, ergosterol biosynthesis 944.

Cytochrome P-450 C_{4H}

C.D., *Pseudomonas putida* 1773.

Cytochrome peroxidase

cyanide, azide, fluoride, binding, E.S.R., *Pseudomonas aeruginosa* 3469.

Cytochromes

redox potential, E.S.R., N.M.R., *Pseudomonas stutzeri* 7713.

respiration (cyanide insensitive), correlation, cyanide, resistance, bacteria

9045.

Cytogenetics

Verticillium albo-atrum wilt disease resistance, *Medicago sativa* 2884.

Cytokinins

Alternaria brassicicola secretion, pathogenesis, leaves infection, Brassica 8028.

biosynthesis, rhizosphere microorganisms, pH effects on, *Pinus sylvestris* 8161.

content, Lycopersicon esculentum, tomato spotted wilt virus infection 4567.

Cytolysis

acrylonitrile epoxidase, gram-positive cocci, methodology 1578.

Cytomegalovirus

antibodies, screening, blood donors, methodology comparison 2448.

binding, erythrocytes, use, passive hemagglutination, methodology 643.

detection, centrifugation, clinical isolates, monoclonal antibodies, methodology 9437.

identification, tissue culture, monoclonal antibodies, fluorescence, staining,

methodology 8441.

Cytomegalovirus, (continued)

immunoglobulin G, quantification, enzyme-linked immunosorbent assay methodology

man 649.

infection, diagnosis, chemiluminescence enzyme-linked immunosorbent assay 156.

interferon, antiviral activity, cell culture, mice 2226.

Cytomegalovirus (human)

antibodies, detection, complement fixation, enzyme-linked immunosorbent assay,

indirect fluorescent antibody test 1551.

antiviral activity, interferon 9121.

diagnosis, immunoglobulin M detection, enzyme-linked immunosorbent assay, man

6742.

DNA, hybridization analysis, use, 2-acetylaminofluorene, enhancement, fluorescent

antibodies, methodology 9282.

envelopes antigens, vaccines, immunity (cell-mediated), immunity (humoral),

guinea-pigs 4072.

replication, antiviral activity, 9-1,3-dihydroxy-2-propoxymethylguanine \pm

interferon 9115.

replication inhibition, D,L- α -difluoromethylornithine antiviral activity

1782.

replication, nucleosides, analogs, effects on 4022.

Cytomegalovirus (murine)

replication, antiviral activity, cyclosporin A, cell culture 8330.

Cytophaga

endotoxins, humidifiers, textile industry, allergic alveolitis, man 1944.

lysis, *Candida pseudopedunculata*, *Geotrichum candidum*, single-cell protein

production 8815.

Cytoplasm

cofactors, *Methanobacterium thermoautotrophicum* methanogenesis, membrane ve-

9035.

phenylalanyl-tRNA synthetase, carbohydrate composition, comparison mitochondria

Saccharomyces 930.

Streptococcus mutans, proteins, electrophoresis 6806.

Cytoplasmic membranes

inhibition, antibiotics antibacterial activity 9174.

proteins, *Bacillus subtilis*, purification, characterization 2555.

Saccharomyces cerevisiae, structure, *Bacillus subtilis* bacillomycin, iturin A,

effects on 4886.

Cytoplasmic polyhydroxal virus

antiviral activity, poly (I:C), 2',5'-oligo(A), *Bombyx mori* isolates 473.

structural proteins, purification, characterization, isolates, *Heliothis armigera*

3422.

Cytoskeleton

BCC purification, *Mycobacterium bovis* 3542.

Cytospora

canker, Rubus, USA, Ohio 8846.

dieback, wound infection, pruning, *Prunus persica* 8805.

Cytospora chrysosperma,

decay, *Populus tremula*, stands 356.

Cytospora eucalypticola,

Eucalyptus marginata canker, pathology 370.

Cytospora leucostoma

inoculation methodology, disease resistance plant breeding screening projects,

Prunus persica 5487.

Cytostatic agents

Momordica charantia, antiviral activity, purification, characterization 5746.

Cytotoxicity

hypothiocyanite+hydrogen peroxide, bactericidal activity, *Peptostreptococcus*

anaerobius, *Escherichia coli* 6445.

metronidazole, misonidazole, reduction effects on, *Escherichia coli* 6451.

Cytotoxins

Pseudomonas aeruginosa, pathogenicity, *Manduca sexta* biological control, review

5211.

purification, characterization, *Escherichia coli* 3753.

Cytovarinin

isolation, methanolysis, structure 1433.

(D,L)-7-(α -Fluorocyclamino)cephalosporanic acids

β -lactamase, hydrolysis, antibiotic resistance, antibacterial activity,

Escherichia coli, *Enterobacter cloacae* 9190.

D,L- α -Difluoromethylornithine

antiviral activity, cytomegalovirus (human) replication inhibition 4762.

Dacrymyces

wood biodegradation 1891.

Dacrymycetaleae

wood biodegradation 1891.

Dactylis glomerata

silage, proteolysis 1068.

Dactylium dendroideae

pathogens, disease control, thiabendazole, *Agaricus brunneus* 8132.

Dactylorhiza purpurella

symbiosis, *Ceratobasidium cornigerum*, glucose uptake 5645.

Desmonorops draco

resin, antibacterial activity, *Staphylococcus aureus* 2211.

Deiries

cattle, antibiotics administration, bacteria, antibiotic resistance 430.

Dairy industry

dairy products, proteolytic enzymes, fungi 199.

flavor compounds production, 2,3-butanedione, acetoin, immobilized cells,

Streptococcus lactis subsp. *dactylolactis* 6992.

β -D-galactosidase activity, assays, *Saccharomyces lactis*, *Kluyveromyces*

fragilis 5172.

industrial effluents, wastewater treatment, rotating discs, microorganisms 6697.

sanitation, hygiene 5667.

wastewater treatment, activated sludge 4115.

wastewater treatment, when, immobilized enzymes, β -D-galactosidase 5830.

Dairy products

agglutinins, staining, immunoassays, *Streptococcus lactis* 3718.

detection, aflatoxin B1, aflatoxin G1, screening methodology, Egypt 7064.

proteolytic enzymes, fungi, dairy industry 199.

psychrotrophic bacteria isolates, proteolytic enzymes 1057.

shelf life, β -D-glucosidase activity effects on, *Pseudomonas fluorescens*

8197.

Staphylococcus contamination, India, public health 1056.

ultrahigh temperature sterilization, heat inactivation, α -amylase, *Bacillus*

Dairy products, (continued)

- stereothermophilus, *Xanthomonas campestris* 6974.
- Dairy starters,**
alcohol dehydrogenase activity, *Streptococcus lactis* 2576.
casein production, *Streptococcus cremoris*, *Streptococcus diacetylactis* 7861.
cheese production, biotechnology, microorganisms 5328.
continuous culture, milk fermentation, yogurt production 6997.
counting methods, ATP assays, milk, yogurt 6996.
fatty acids, lipids, biosynthesis, fermentation, milk 7865.
fermentation, glucose, lactose, limiting factors, *Streptococcus lactis* 6994.
fermented milk products, microorganisms 5329.
freezing, viability, *Streptococcus cremoris* 4450.
fungi, cheese 6985.
genetic engineering, lactic acid bacteria 3696.
inhibition, milk 7862.
lac plasmid, transformation, protoplast fusion, *Streptococcus lactis* 8702.
lactic acid bacteria, amines levels, milk 6962.
lactic acid bacteria, cost-benefit analysis 4464.
lactic acid bacteria, preservation, freeze drying 1612.
lactic acid bacteria, proteolytic enzymes 5346.
Leuconostoc cremoris, aroma compounds production, mutagenesis, U.V. radiation, N-nitroso-N-methyl-N-nitroguanidine 1906.
milk phosphate effects on phages contamination, *Lactobacillus bulgaricus* 3716.
milks selection, streptomycin, antibiotic resistance, *Streptococcus* 2730.
Oospora lactis, ripening, cheese 6978.
page 646 (MLB) replication, Cheddar cheese production, *Streptococcus lactis* 4456.
phage infection, isolation, characterization, *Streptococcus lactis* subsp. *lactis* 5337.
Propionibacterium, cold temperature-sensitive mutant, mutagenesis, N-nitroso-N-methyl-N-nitroguanidine 2729.
Propionibacterium, fatty acid composition, relationship growth, cold 3699.
proteolysis, temperature, effects on, cheese 1907.
protoplasts production, use transformation, lactic acid bacteria 5952.
reviews 8710.
strains synergism, acid production 7866.
Streptococcus cremoris, inhibition, hypoxanthine, hydrogen, milk 7863.
Streptococcus cremoris, lactic acid production, growth, measuring techniques, dairy products 7867.
Streptococcus cremoris, prophages, DNA homology, lysis, phages 5335.
Streptococcus cremoris, proteinase deficiency, use Cheddar cheese production 2731.
Streptococcus cremoris, role bacteriocins 2311.
Streptococcus group N, autolysis, media (culture) carbon sources effects on 2733.
Streptococcus group N, *Leuconostoc*, phages contamination, reviews 210.
Streptococcus lactis, cream production, flavorings, milk, buffaloes 2736.
Streptococcus lactis, lactose fermentation, plasmids curing, temperature effects on, media (culture) 7864.
Streptococcus lactis, *Streptococcus cremoris*, proteinase deficiency, temperature tolerance, lactic acid production 2732.
Streptococcus lactis subsp. *diacetylactis*, plasmid pNP40, transformation, phage c2 resistance, nesin antibiotic resistance 2196.
temperature tolerance, acid production, lactic acid bacteria 6187.
use, thermophilic bacteria, reviews 212.
why, characterization, *Cluiveromyces fragilis* 3717.
yogurt, buffaloes milk, *Lactobacillus bulgaricus*, *Streptococcus thermophilus* 6989.
yogurt, lactose utilization, man, lactic acid bacteria 4452.
- Delbergia alscov,**
Phoma nivea comb. nov. infection 8017.
- Delbulus longulus,**
vectors, host range, Spiroplasma stunt, Mycoplasma bushy stunt 7960.
- Damping-off,**
Beta vulgaris, biological control, Pythium oligandrum 8111.
biological control, Agrobacterium radiobacter, extracellular polymers, polysaccharides, seed treatments, Lycopersicon esculentum 6309.
Cicer arietinum, incidence, Rhizoctonia bataticola inoculum, mycelia, sclerotia, soil 1976.
disease resistance, Philippines, Nicotiana tabacum 7179.
Fusarium avenaceum, disease control, soil pasteurization, Trifolium subterraneum 6301.
Medicago sativa seedlings, Pythium ultimum, Rhizoctonia solani, Fusarium roseum, greenhouses, USA, California 1115.
phytopathogenic fungi, Pinus banksiana, Picea mariana, soil amendment, organic matter, effects on 1239.
Pythium aphanidermatum, Lycopersicon esculentum, disease control, benomyl, demosan, captan 1228.
Pythium, disease control, agricultural practices, comparison, fungicides, Phaseolus vulgaris 1210.
Pythium, Eucalyptus, incidence, greenhouses 8942.
Pythium ultimum, biological control, Agrobacterium radiobacter polysaccharides, seed treatments, Beta vulgaris 2891.
Pythium ultimum, biological control, Penicillium oxalicum, seed treatments, Cicer arietinum 8114.
Pythium ultimum, biological control, use pyoluteorin, biosynthesis, Pseudomonas fluorescens 2888.
Pythium ultimum, Lepidium sativum seeds, biological control, Pythium oligandrum 8114.
Pythium ultimum, Pisum sativum, disease control, use, Trichoderma viride + fungicides 338.
Pythium ultimum, Pythium irregulare, disease control, seed treatments, Brassica 8141.
Rhizoctonia solani, host range, pathogenicity 282.
Rhizoctonia solani, suppression, fungi antagonists, composts, Raphanus sativus 290.
survival, seeds dispersal, Platypodium elegans 1240.
Vigna unguiculata, fungicides disease control, herbicides soil applications effects on 2090.
- Dendelon yellow mosaic virus,**
physicochemical properties, transmission (mechanical), Lactuca sativa, Taraxacum officinale 2043.
- Dipirramcin A,**
Micromonospora, biosynthesis, structure, disease control, Rhizoctonia solani, sheath blight, Oryza sativa 4863.
- Dipirramcin B,**
Micromonospora, biosynthesis, structure, disease control, Rhizoctonia solani,

Dipirramcin B, (continued)

- sheath blight, Oryza sativa 4863.
fermentation, antifungal activity, Micromonospora, taxonomy 2286.
- Dapsone,**
drug resistance, leprosy, man, reviews 3023.
drug sensitivity testing, Mycobacterium leprae 4855.
- Dark,**
effects on susceptibility, cowpea mosaic virus, infection, Vigna sinensis 6223.
- Dasypodidae,**
liver, Mycobacterium leprae infected, isolation methodology 5903.
- Delataca,**
actinorrhizas, Frankia, ultrastructure, nitrogenase, nitrogen fixation 2969.
- Datisca cannabina,**
actinorrhizas, Frankia, nodulation, biotyping 8158.
nitrogen fixation, Frankia 4594.
nodulation, actinorrhizas, nitrogen fixation, nodules morphology 8151.
- Datura metel,**
leaves histopathology, tomato mosaic virus 7168.
potato virus Y, disease transmission, heredity, Myzus persicae, Aphis gossypii 3827.
potato virus Y, histopathology, characterization 8864.
- Datura stramonium,**
leaves, lesions, potato virus X + mixed infection tobacco mosaic virus 288.
ultrastructure, Euphorbia virus, infection, effects on 3817.
- Daucus**
seeds oils, effects on Aspergillus parasiticus aflatoxins biosynthesis 3747.
- Deucus carota,**
biodegradation, cellulase, pectinase 8538.
damping-off, Rhizoctonia solani, pathogenicity 282.
dieback, Pythium, disease control, fungicides 8116.
seeds, Alternaria dauci persistent infection, fungicides, antifungal activity 1226.
- Deutere innoxia,**
Alternaria alternata leaf blight, tenuazonic acid isolation, association, characterization 5394.
- Daylength,**
effects on Glomus macrocarpum infection, Eupatorium odoratum, Guizotia abyssinica 8977.
- 3-De-O-methylsporacin A,**
antibacterial activity, gram-negative bacteria, gram-positive bacteria 7479.
- Deacylation,**
benzylpenicillin, penicillin amidase activity, models 7436.
benzylpenicillin, 6-aminopenicillanic acid production, penicillin amidase activity, bioreactors 6531.
- Dealkylation,**
activity, methane monooxygenase, Methylosinus trichosporium 8547.
trifluralin, soil microorganisms 1041.
- Deamination,**
6-chloro-N-ethyl-1,3,5-triazine-2,4-diamine, Rhodococcus corallinus 8691.
- Decarboxylation,**
reagents D, analogs, synthesis 1429.
phthalic acid, biodegradation, Bacillus, marine microorganisms 998.
- Decay fungi,**
Basidiomycetes, biodegradation, insulation foams, buildings 7243.
Basidiomycetes, storage, wood, Salix nigra, Populus deltoides 8197.
Fagus sylvatica, biological control, bacteria, fungi 5589.
Fagus sylvatica, biological control, Trichoderma viride, Bacillus, field trials 5587.
inhibition, pentachlorophenol, wood preservatives, buildings 7242.
preservatives tolerance, methodology 2108.
white rot, brown rot, soft rot, vanilla acid, syringic acid, metabolism, association, lignin, biodegradation 2705.
wood, polar environments 3920.
- Dechlorination,**
biodegradation, 2,4,5-T, methanogenic bacteria 6160.
6-chloro-N-ethyl-1,3,5-triazine-2,4-diamine, Rhodococcus corallinus 8691.
- Dechloromollitoidol,**
Monilia fructicola, synthesis 1953.
- Declorubicin,**
structure, Streptomyces virginiae 7459.
- Decline,**
Pythium ultimum, disease control, efosite-Al, metalaxyl, mancozeb, Vitis vinifera 8122.
roots infection, Amillaria mellea, Picea rubens 8948.
- Decomposition,**
ash, soil microorganisms, acetic acid, acid production, ash, stabilization, soil properties 7300.
carbon sources, soil microorganisms, biomass levels, factors affecting, soil analysis, clays 2935.
crop residues, soil microorganisms, hydraulics effects on percolation 7509.
fungi, Pinus leaves, saprophy, food preferences, Porcellio scaber 2912.
leaf litter, forests, Canada 8933.
leaves, psychrotrophic microorganisms, psychrophilic microorganisms 5306.
litter fall, forests, Fagus sylvatica, Quercus petraea, British Isles 352.
litter, soil microorganisms, rain forests, tropical environment 7224.
litter, soil microorganisms, rain forests, tropical environment 7226.
Mycena galopus, Marasmius androsaceus, competition, Onychium latus grazing effects on, leaf litter, Picea sitchensis 8940.
organic matter, fungi, tropical environment, rain forests 2911.
organic matter, humification, mathematical models, soil microorganisms 5638.
straw, bacteria polysaccharides formation 6051.
- Decontamination,**
aflatoxin B1, ammonia + heat, corn 7889.
aflatoxins food contamination peanuts meals, methodology, use methylamine + calcium hydroxide 7097.
mycotoxins food contamination, methodology, reviews 7073.
Salmonella, microwave radiation, steam, hot air, feeds, chickens 1066.
U.V. radiation, dialysis, disease control, peritonitis, man 6718.
- Defective interfering particles,**
vesicular stomatitis virus, detection, DNA hybridization analysis probes 4987.
- Defective mutant,**
aspartate kinase, Streptomyces clavuligerus, diamino pimelic acid contents, antibiotics biosynthesis 2257.
Escherichia coli envelopes, β -lactamase biosynthesis, excretion 2601.
Pseudomonas aeruginosa M form, alginate acid, lipase stimulation 2570.

Defective mutant, (continued)

Streptomyces lactamurans, cephamycin C, biosynthesis, characterization 8380.

Defensive mechanisms,

induction, disease control, rust 8102.
phytoalexins induction, infection, *Ceratocystis ulmi*, *Chondrostereum purpureum*, *Coriolius versicolor*, *Ulmus glabra* 5500.
Picea abies, mixed infection, *Isis typographus*, *Ceratocystis*, Norway 1237.

Deficient mutant,

alcohol dehydrogenase, production, glycerol, ethanol, *Saccharomyces cerevisiae* 3642.
cellulase, *Sporotrichum pulverulentum*, lignin biodegradation, lignocelluloses 1886.

β -lactamase, amoxicillin production, *Pseudomonas melanogenum* 3104.
pyruvate kinase, aspartic acid production, *Brevibacterium flavum* 7661.
pyruvate kinase, lysine production, *Brevibacterium flavum* 8527.
pyruvic acid, *Clostridium saccharolyticum*, ethanol production 152.

Defoliation,

association ethanol levels, dieback, colonization, *Armillaria mellea*, *Quercus velutina*, *Quercus alba* 5586.

Degradation,

carbon sources, soil microorganisms, kinetics, models 2127.

Degradation products,

starch, use α -amylase assays, *Aspergillus oryzae* 7677.

Dehalogenation,

chloropirin, *Pseudomonas putida*, biodegradation 6159.
pathways, aromatic compounds biodegradation, anaerobic bacteria 2701.

Dehydration,

resistance, sucrose lactose effects on, *Saccharomyces cerevisiae* 1047.

Dehydrocholic acid,

reduction, 12-ketocholenoxycholeic acid synthesis, activity, NADH regeneration 8090.

Dehydrogenase,

activity, dissolved oxygen effects on, activated sludge 4095.
activity, fertilizer applications effects on, rhizosphere microorganisms, *Oryza sativa* 7297.

activity, oxygen, pH, temperature, nitrogen inorganic compounds effects on, soil 8040.

Saccharomyces cerevisiae, *Curvularia lunata*, *Mortierella ramanniana*, reduction, bicyclo[3.2.0]hept-2-en-6-one 5255.
soil microorganisms, herbicides effects on 8254.

16-Dehydropregnenolone,

production, 16-dehydropregnenolone acetate fermentation, *Streptomyces albus* 6049.
fermentation, 16-dehydropregnenolone, 16-dehydropregesterone, *Streptomyces albus* 6049.

1-Dehydropregesterone,

Mycobacterium aurum, biosynthesis, sterols biodegradation 946.

16-Dehydropregesterone,

production, 16-dehydropregnenolone acetate fermentation, *Streptomyces albus* 6049.

5-Dehydroquinase,

purification, *Schizosaccharomyces pombe* 1800.

5-Dehydroquinolate synthase,

purification, *Schizosaccharomyces pombe* 1800.

Deletion mutant,

analysis, *Vibrio cholerae* toxins genes, nucleotide sequence, vaccines development 2327.

Deionix regia,

rot, epidemiology, *Phellinus noxius* 5590.

Deiphacidae,

disease transmission, plant viruses 7130.
disease transmission, viruses, mycoplasma-like organisms, *Oryza sativa* 7156.
vectors, disease transmission, mycoplasma-like organisms, plant viruses 7157.

Deltamycin A,

depoxydation, products antibacterial activity 5789.
production, *Streptomyces halstedii* subsp. *deltae* conversion carbomycin A, structure 5786.

Deionin,

cell membranes, effects on, *Micrococcus lysodeikticus* 7355.

Dematophora necatrix,

root rot, horticulture crops disease resistance 2073.

2-Demethoxydehydro-griecoquin,

stereochemistry, hydrogenation, *Streptomyces cinereocroatus* 3112.

Demosan,

disease control, *Pythium aphanidermatum* damping-off, *Lycopersicon esculentum* 1228.

Denaturation,

phosphatase, electrophoresis, *Acholeplasma laidlawii* 7707.

Dendroctonus ponderosae,

association, roots, plant diseases, pathogens + *Cronartium ribicola* blister rust, *Pinus monticola*, USA, Idaho 8162.

Dengue virus,

antigens, detection, agglutination, protein A 4991.
cell culture, *Toxothrix ambisensu*, cells, methodology 639.
infectivity assays, plaques formation, cell lines 8450.
seroepidemiology, hemolysis, detection antibodies, man 4996.

Denitrification,

acid rain, pollution effects, soil microorganisms 8245.
activated sludge 1473.
activated sludge 2345.
agricultural practices, reviews, crop fields 5671.
anaerobic conditions, soil 5670.
association, aeration, bacteria 1466.
bacteria, soil, association, *Fagus sylvatica* 2991.
colonies, *Eudryates chrysophorus*, *Aptenodytes patagonicus* 9003.
crops roots, flooded soils 2994.
denitrifying bacteria, fertilizers effects on, soils (podzolic) 8232.
denitrifying bacteria, nitrate reduction 1484.
following, agricultural land, *Triticum aestivum* 2988.
films pH, rotating discs, wastewater treatment 2356.
gas production, nitrogen nitrous oxide ratio, crop fields, *Hordeum vulgare* 5672.
industrial effluents, wastewater treatment 2373.
inhibitors, simazine, atrazine, denitrifying bacteria, soil 9002.
nitrifying bacteria, nitrification, soil 3966.

Denitrification, (continued)

nitrite reductase (cytochrome) reduction, nitrite, reviews, *Pseudomonas aeruginosa* 7706.

nitrogen cycle, denitrifying bacteria, soil, reviews 4655.

nitrogen cycle, grasslands 5666.

nitrous oxide biosynthesis, in vitro, *Rhizobium leguminosarum* var. *trifolii* 9020.
pathway, *Bradyrhizobium japonicum*, bacteroids, in vitro, nodules, *Glycine max* 8995.

rhizosphere microorganisms, paddy fields, *Oryza sativa* 7284.

role nitrite, soil pH effects on 5673.

soil, cattle urine soil 2948.

soil density 5659.

soil microorganisms, nitrous oxide production, soil thawing 7285.

soil moisture, drying effects on, forests 8938.

soil, plantations, *Hevea* 6356.

temperature, effects on, soil microorganisms, soil 4672.

waste water, association, aeration, bacteria 1466.

waste water, *Hyphomicrobium* growth, methanol carbon sources 1492.

wastewater treatment, bioreactors, denitrifying bacteria 4107.

wastewater treatment, industrial effluents 8406.

wastewater treatment, land disposal, munitions, industrial effluents 2338.

wastewater treatment, reviews, bibliographies 4908.

Denitrifying bacteria,

activity, paddy fields 404.

2-aminobenzoate biodegradation, anaerobic conditions 6172.

bioreactors, denitrification, wastewater treatment 4107.

denitrification, agricultural practices, reviews, crop fields 5671.

denitrification, anaerobic conditions, soil 5670.

denitrification, following, agricultural land, *Triticum aestivum* 2988.

denitrification, fertilizers effects on, soils (podzolic) 8232.

denitrification, gas production, nitrogen nitrous oxide ratio, crop fields, *Hordeum vulgare* 5672.

denitrification inhibitors, simazine, atrazine, soil 9002.

denitrification, kinetics 1484.

denitrification, nitrogen cycle, soil, reviews 4655.

denitrification, rhizosphere microorganisms, paddy fields, *Oryza sativa* 7284.

denitrification, role nitrite, soil pH effects on 5673.

denitrification, soil density 5659.

denitrification, soil moisture, drying effects on, forests 8938.

denitrification, soil, plantations, *Hevea* 6356.

denitrification, wastewater treatment, industrial effluents 8406.

population levels, continuous culture reactors, organic compounds, nitrite, nitrate, effects on 660.

+ *Stichococcus bacillaris*, nitrogen removal, rotating discs, wastewater treatment, industrial effluents, fertilizers 9236.

Denmark,

Drechlera teres, net blotch, yield, *Hordeum vulgare* 8782.

Solanum tuberosum, spraing disease resistance 8910.

Density gradients,

centrifugation, influenza A virus hemagglutinins isolation, bromelain cleavage 4994.

centrifugation, methodology, isolation, protoplasts, *Saccharomyces cerevisiae* 9334.

centrifugation, scrapie agent purification 4985.

cesium chloride, ultracentrifugation, foot-and-mouth disease virus 6736.

cesium chloride, viruses purification methodology 642.

methodology, bacteria separation, waste water populations 3269.

potassium tartrate + glycerol, separation techniques, viruses, feces, man 1555.

Dental caries,

bacteria, fluoridation effects on epidemiology, British Isles, children 7555.

fluoridation, children 8431.

incidence, drinking water, fluoride levels, children 6728.

prophylaxis, dental sealants, cost-benefit analysis, man 6724.

prophylaxis, endo-1,3- α -D-glucanase, animal models 4140.

prophylaxis, fluoridation water treatment, children 7552.

prophylaxis, fluoride release equipment, oral cavity, animal models 6725.

prophylaxis, fluoride, drinking water, man, France 5868.

Dental hygiene,

dental plaque, periodontitis, man 2422.

Dental manipulation,

abrasion, pumice, *Acinetobacter* contamination 7540.

medical instruments, sterilization, bioassays, spores, *Bacillus subtilis*, *Bacillus stearothermophilus* 7545.

Dental plaque,

antibiotic sensitivity testing, antibiotics prophylaxis, endocarditis, man 2252.

bacteria, antibiotic sensitivity testing 5753.

chlorhexidine, topical applications, mouthwashes, man 2425.

dental hygiene, periodontitis, man 2422.

disease control, chlorhexidine mouthwashes, surgery, man 2423.

fluoride, effects on, streptococcus mutants, growth, acid production 7554.

isolates, gram-negative bacteria, gram-positive bacteria, antimicrobial activity, dyes, *xythrosine*, *fluorescein* 7553.

Lactobacillus, *Streptococcus* mutants, prophylaxis, sodium fluoride topical application, cancer patients 6730.

oral hygiene effects on, maxilla surgery, man 6726.

removal, sucrose dietary intake effects on, man 4969.

staining, man 4968.

Dental restorative materials,

plastics, corrosion, *Pseudomonas aeruginosa* 4965.

Dental sealants,

dental caries prophylaxis, cost-benefit analysis, man 6724.

Denitrifices,

antibacterial activity 4966.

Denitriety,

dyes, antimicrobial activity, gram-negative bacteria, gram-positive bacteria, dental plaque isolates 7553.

sterilization, disinfection, asepsis, environmental hygiene 1519.

Denitrifying bacteria,

chlorhexidine mouthwashes, dental plaque, disease control, man 2424.

denitrates, antimicrobial agents, sanitizers, bacteria, fungi 2420.

Deodorization,

gases odors, wastewater treatment, industries 9248.

industrial pollution odors, use peat 9232.

sewage sludge odors, chemicals treatment 9247.

- biole,**
biological control, *Metarhizium anisopliae* inoculum production, factors affecting 526.
- Deoxy-4-sulfonamido-oleanomycin,**
derivatives, chemical modification, biological properties 3123.
- derivatives,** comparison, oleandomycin, erythromycin, antibacterial activity, *Staphylococcus aureus* 3121.
- Deoxy-alto-heptulosephosphate synthase,**
isolation, characterization, *Bacillus pumilus* 1766.
- Deoxy-D-glucose**
effects on, replication, poliovirus, vesicular stomatitis virus 9127.
prevention, feedback inhibition, dextranase biosynthesis, *Lipomyces starkeyi* 4331.
- Deoxy-D-manno-2-octulosonic acid,**
derivatives, lipopolysaccharides, *Vibronaceae* 5200.
- Deoxy-D-threo-pentulose**
biosynthesis, *Bacillus pumilus* extracts 5204.
- Deoxy-L-threo-pentulose**
biosynthesis, *Bacillus pumilus* extracts 5204.
- Deoxyadenosine,**
inhibition DNA biosynthesis, herpes simplex virus 6481.
- Deoxycholic acid,**
induction, 7 α -hydroxysteroid dehydrogenase, 7 β -hydroxysteroid dehydrogenase, purification, induction, *Clostridium abscondum* 4305.
Pseudomonas biodegradation, anaerobic conditions 6154.
- Deoxyformycin,**
association, herpes simplex virus 1, mutants, drug resistance, arabinosyladenine 9068.
- Deoxyguanosine,**
inhibition DNA biosynthesis, herpes simplex virus 6481.
- Deoxyvalenol,**
food contamination, effects on body weight, food conversion, *Salmo gairdneri* 219.
production, *Gibberella zeae*, ear rot, disease resistance, plant breeding, hybrids, *Zea mays* 1180.
- Deoxyxylirimycin,**
production, *Bacillus subtilis* 7471.
- Deoxyxyldipyrroline photolase,**
purification, characterization, *Escherichia coli* 2622.
- Deoxyribonuclease,**
recB protein, reconstitution, *Escherichia coli* 1775.
susceptibility, flocculation mutants, *Pseudomonas* 4929.
treatment, *Rickettsia prowazekii* DNA purification, chick embryos yolk sac 5033.
- Deoxyribose**
derivatives, antiviral activity, herpes simplex virus 1, structure-activity relationships 4768.
- Deoxyuridine triphosphatase,**
Acholeplasma laidlawii, purification, characterization 6845.
- dermatophilus congoensis,**
antigens precipitation, methodology comparison 1627.
- dermatophyte fungi,**
amino acids, antifungal activity, *Trichophyton mentagrophytes*, microsporium gypseum 9106.
ergosterol biosynthesis, inhibition, antifungal activity, bifonazole, clotrimazole 8314.
protoplasts, isolation, methodology 8483.
susceptibility methodology, ketoconazole, miconazole, clotrimazole, griseofulvin 1336.
- deriz gummosa,**
nitrogen-fixing bacteria, *Saccharum* 5652.
- desacetoxycycephalosporin C synthetase,**
penicillin analogs enzymatic synthesis, *Streptomyces clavuligerus* 5776.
- desatination plasmids,**
microbiology, physicochemical properties, water quality, bacteria 4942.
- deserts,**
Atreplex gardneri, roots colonization, vesicular-arbuscular mycorrhizas, seasonal variations, environmental factors 385.
ecological evaluation, vesicular-arbuscular mycorrhizas, USA, California 8222.
plants, ectomycorrhizas, endomycorrhizas, Algeria 5621.
soil microorganisms geographical distribution, USA, Arizona 7246.
soil microorganisms, soil properties, soil temperature, ecological analysis 4623.
- desferrioxamine,**
bacteria, urinary tract, clinical isolates, susceptibility 4729.
- desiccation,**
Rhizobium meliloti, viability, inoculum, soil salinity 4663.
- tolerance, *Rhizobium* soil isolates, nodulation, tropical environment, *Vigna unguiculata* 8241.
- destrubiobiotin,**
conversion, biotin production, *Rhizopus delemar* 964.
- desomycin,**
antibiotic resistance, genes, cloning, *Streptomyces* 1314.
- desulfobacter,**
+ *Chlorobium limicola* f.sp. *thiosulfatophilum*, mixed culture, calcium sulfate, sulfate, conversion sulfur 5693.
- desulfotomaculum,**
spores, heat resistance, food industry 7030.
- desulfotomaculum nigrificans,**
endodoxycyanoblaste (apurinic), purification, characterization 6688.
- desulfovibrio,**
+ *Acetivibrio cellulolyticus* + *Methanosarcina barkeri* mixed culture, cellulose degradation, methanogenesis 2185.
biodegradation, petroleum sulfur compounds 8274.
cytochrome c3 structure-activity relationships, redox properties 5108.
mixed culture, methanogenic bacteria, acetic acid conversion, methanogenesis 3964.
- desulfovibrio africanus,**
biodegradation, pulp mills, effluents 1467.
ferredoxin multiple forms, E.S.R., C.D. 3407.
- desulfovibrio desulfuricans,**
cytochrome c3, purification, methodology 5163.
hydrogenase immobilization, activity 6837.
tetrapyrroles biosynthesis, reviews 4380.
- desulfovibrio vulgaris,**
bactericidal activity, sodium tetraborate, 2,4-dinitrophenol 3057.
- Desulfotoluidro vulgaris, (continued)**
cytochrome c3 hydrogenase secondary structure, X-ray crystallography 2625.
mixed culture, methanogenic bacteria, immobilized cells, methanogenesis, sucrose conversion 2182.
steel corrosion, *Vibrio anguillarum* effects on 2722.
- Detergents,**
antibacterial activity, *Escherichia coli*, milk residues, pH, effects on 9264.
biodegradation, alkyl sulphatase, purification, characterization, *Pseudomonas* 4343.
fungi, biodegradation, estuaries, freshwater environments 1037.
proteolytic enzymes, bacteria 47.
resistance, *Enterobacteriaceae* 7339.
solubilization African swine fever virus antigens, inactivation, vaccines, immunity, pigs 1452.
- Detoxification,**
blood, *Escherichia coli* asparaginase, immobilized enzymes, bioreactors 2575.
captain, glutathione S-transferase, resistance, *Botrytis cinerea* 8297.
chlorinated hydrocarbons, microorganisms, genetic engineering 4089.
12-chlorodehydroabietic acid, industrial effluents, pulp mills, *Mortierella isabellina* 2706.
mercury, resistance, bacteria, clinical isolates, reviews 9071.
methodology, aflatoxins, food contamination, *Gossypium hirsutum* seeds meals 7081.
mycotoxins, food contamination, feeds contamination 7893.
polyorbate, media (culture), *Leptospira* 9321.
relationship pisin tolerance, *Nectria haematococca* 431.
waste treatment, genetic engineering, microorganisms, research programs 4088.
- Detritus,**
lipidocelluloses, biodegradation, bacteria, fungi, salt marshes sediments 6171.
white rot fungi, effects on pathogens, *Cymodocea* dactylon, *Eramochloa ophiroides*, *Poa pratensis*, *Stenotaphrum secundatum* 8785.
- 2-Deuterio-2-cyclohexen-1-one,**
reduction, *Clostridium* growth 1881.
- 3-Deuterio-2-cyclohexen-1-one,**
reduction, *Clostridium* growth 1881.
- Deuterium oxide,**
effects on hydrolysis, substrates, kinetics, β -lactamase, *Bacillus cereus* 4278.
- Deuteromycetes,**
effects on *Basidiomycetes* biodegradation coconuts fibers 1031.
fungal flora, *Fagus sylvatica*, association, natural pruning 2105.
- Developing countries,**
agricultural products, aflatoxins detection methodology 216.
agricultural wastes, composting 4097.
agriculture, biotechnology 318.
disease resistance, plant breeding, *Solanum tuberosum* 2874.
sewage sludge, solid wastes, composting 5835.
- Dew,**
temperature, association, pathology, *Botryospheria vaccinii* latent infection, *Vaccinium macrocarpon* 8041.
- Dextran,**
association, activation, dextranucrase, *Leuconostoc mesenteroides* 5993.
hydrolysis, dextranase, bacteria, sucrose production, industries 53.
+ milomycin C conjugates, antibacterial activity regeneration 455.
- Dextranase,**
bacteria, dextran hydrolysis, sucrose production, industries 53.
bacteria, fungi, isolation, characterization 5138.
biosynthesis, feedback inhibition, prevention, 2-deoxy-D-glucose, D-glucosamine, *Lipomyces starkeyi* 4331.
biosynthesis, *Penicillium aculeatum*, characterization 7741.
fungi, hydrolysis, polysaccharides, *Streptococcus* 8679.
immobilized enzymes, use, dextranucrase purification, mutants, *Leuconostoc mesenteroides* 5147.
kinetics, relationship substrates molecular weight, *Flavobacterium* 8574.
purification, characterization, *Flavobacterium* 2615.
- Dextrane,**
biodegradation, enzymatic activity, *Leuconostoc mesenteroides* 7818.
biosynthesis, industrial applications, reviews, *Leuconostoc* 8617.
polyethylene glycol, solutions, two-phase systems, separation techniques, conidia, sporangiospores, fungi 8489.
- Dextranucrase,**
activation, association, dextran, *Leuconostoc mesenteroides* 5993.
biosynthesis, *Leuconostoc mesenteroides* 924.
biosynthesis, *Leuconostoc mesenteroides* 1744.
biosynthesis, *Leuconostoc mesenteroides* 5975.
multiple forms, purification, characterization, proteolysis role, electrophoresis, *Streptococcus* genus 6045.
purification, use dextranase, immobilized enzymes, mutants, *Leuconostoc mesenteroides* 5147.
- Di- β -lyxylcapromycin,**
antibacterial activity 3160.
- 6,11-Di-O-methylerythromycin A,**
synthesis, antibacterial activity 5782.
- Diacetoxysclerol,**
corn food contamination, screening, use, *Tetrahymena pyriformis* 7055.
Fusarium, detection, grain, Egypt 7069.
Fusarium roseum, feeds contamination, feeding behavior, chickens 7898.
- Dialkylsulfides,**
biological control, *Aschersonia aleoideis* 3565.
- Dialysis,**
continuous culture, fermentation, vegetables, lactic acid bacteria 2740.
disinfectants, disease control, peritonitis, clinical trials, man 6721.
U.V. radiation, decontamination, disease control, peritonitis, man 6718.
- (4,6-Diamidino-2-phenylindole)-fluorochrome,**
staining, *Cryptosporidium* neofarms, phagocytosis, microscopy 2524.
- 2,6-Diamino-9-(2-hydroxyethoxymethyl)purine,**
antiviral agents, radioimmunoassay methodology 2435.
conversion, 9-(2-hydroxyethoxymethyl)guanine production, adenosine deaminase, *Escherichia coli* 502.
- Diaminopimelic acid,**
contents, *Streptomyces clavuligerus* aspartate kinase defective mutant, antibiotics biosynthesis 2257.
- α , ϵ -Diaminopimelic acid,**
levels, soil, bacteria biomass 5614.
- Dianthus caryophyllus,**
protoplasts, carnation mottle virus infection 285.

Subject Index

- Diaporthe helianthi**, infection, *Helianthus annuus*, stem canker, leafspot, USA, Texas 3839.
- Diarrhea**, antibiotics treatment, relationship *Escherichia coli*, antibiotic resistance, man 3034.
bacteria detection methodology, man 5921.
Escherichia coli isolates, children, identification, enterotoxins production association, hybridization analysis 1934.
neonates, pigs, clinical isolates, *Escherichia coli*, antibiotic sensitivity testing 5758.
Shigella, disease control, association, water supplies, sanitation 7529.
- Diaryl methylphosphonates**, structure-activity relationships, antifungal activity 3885.
- 1,4-Diaryl-2-methylpyrrole-3-carboxylate**, synthesis 3169.
- 1,5-Diaryl-2-methylpyrrole-3-carboxylate**, synthesis 3169.
- 1,4-Diarylpyrrole**, synthesis, antibacterial activity 3171.
- 1,5-Diarylpyrrole**, synthesis, antibacterial activity 3171.
- Diarylsulfides**, antibacterial activity 7362.
azetidin-2-one containing, diazetid-2-onyl containing, antibacterial activity 9102.
- Diarylsulfones**, antibacterial activity 7362.
azetidin-2-one containing, diazetid-2-onyl containing, antibacterial activity 9102.
- Diatraea saccharalis**, biological control, pathogenicity, *Metarhizium anisopliae* 6908.
- Diazquinomycin A**, structure 3167.
- Diazquinomycin B**, structure 3167.
- Diazetid-2-onyl**, containing diarylsulfides, diarylsulfones, synthesis, antibacterial activity 9102.
- 6-Diazo-5-oxo-L-norleucine**, effects on, replication, poliovirus, vesicular stomatitis virus 9127.
- 6-Diazo-5-oxonorleucine**, synthesis, *Streptomyces ambofaciens* 1443.
- Dibekacin**, antibacterial activity, clinical isolates 7444.
antibacterial activity, clinical isolates, gram-negative bacilli, *Streptococcus*, *Staphylococcus* 5541.
bactericidal activity, antibacterial activity, clinical isolates 6540.
comparison, antibiotic K-4619, antibacterial activity 7479.
- Dibenzothioephene**, biodegradation, bacteria, reviews 7825.
oxidation, *Sulfolobus acidocaldarius* 8675.
- 1,2-Dibromo-3-chloropropane**, antimicrobial activity, soil microorganisms 1325.
- Dibromochloropropane**, disease control, *Cricotemella xenoplas*, effects on *Fusarium*, *Pythium*, roots necrosis, orchards, *Prunus persica* 7164.
- Dibutyl phthalate**, biodegradation, soil microorganisms 8961.
estuaries, effects on *Escherichia coli*, phenotypes, genotypes 4961.
- Dicarboximides**, antifungal activity, resistance, *Aspergillus nidulans*, *Cladosporium cucumerinum*, *Penicillium italicum* 8236.
- 4,5-Dichloro-1-H-pyrrol-2-yl-2,6-dihydroxyphenyl ketone**, *Pseudomonas fluorescens* biosynthesis, soil, use biological control, damping-off, *Pythium ultimum* 2888.
- 3,4-Dichloroaniline**, biodegradation, bacteria, fungi 6947.
biodegradation, nitrate reduction, *Escherichia coli* 6161.
- Dichlorobenil**, inhibition nitrification, biodegradation, soil microorganisms 3969.
- 1,2-Dichloroethane**, biodegradation, gram-negative bacilli 1020.
- Dichloronitroaniline**, disease control, post-harvest decay, fungi, apples 8052.
- 2,4-Dichlorophenoxyethyl sulfate**, activation, *Pseudomonas putida* thioester hydrolase, soil 880.
- 2,4-Dichlorophenoxyacetic acid**, biodegradation, xenobiotics, inhibition, exudates, aquatic microorganisms 8687.
effects on lactic acid bacteria, growth, physiology 6184.
- 1,2-Dichloropropane**, biodegradation, ozonation, wastewater treatment 1480.
fumigation, effects on soil microorganisms, crop fields 5681.
- Dicloran**, antifungal activity, spore germination, *Aspergillus nidulans* 1222.
resistance resistance, *Sclerotium cepivorum* 5529.
- Dicytol F**, pesticide dichotomy, characterization, antimicrobial activity 3068.
- Dicytostelium discoidium**, calmodulin amino acid sequence, structure-activity relationships comparison cattle 5992.
3'-5'-cyclic-nucleotide phosphodiesterase characterization 2590.
plasma membranes, isolation methodology 4224.
protein kinase, purification, characterization 3455.
protein kinase, purification, characterization 7723.
proteinase, purification, characterization 2595.
- Dicytostelium mucoroides**, soil, environmental effects, altitude, USA, Rocky Mountains 387.
- Dicytostelium sphaerocephalum**, soil, environmental effects, altitude, USA, Rocky Mountains 387.
- Dicytota dichotoma**, dicytol F, epidicytol F, characterization, antimicrobial activity 3068.
- Didymella applanata**, disease resistance, inheritance, *Rubus idaeus* 3869.
- Didymella applanata, (continued)** infection barriers, *Rubus idaeus*, histology 8015.
infection, *Rubus*, phenols levels 5454.
- Didymella bryoniae**, ascospores incidence, *Cucumis sativus*, fruit rot, stem rot 278.
stem blight, *Cucumis*, benzimidazoles, resistance 1223.
transmission (seed), seed-borne diseases, Cucurbitaceae 8036.
- Didymella lycopersici**, stem canker, disease control, solar radiation, *Lycopersicon esculentum* 2847.
- Dieback**, *Armilaria luteobubalina*, electrical impedance, *Eucalyptus obliqua*, *Eucalyptus globulus* subsp. *biocostata* 2117.
Boryodiplodia theobromae, pathology, *Pyrus pyrifolia* 8807.
colonization, *Armilaria mellea*, association defoliation, ethanol levels, *Quercus velutina*, *Quercus alba* 5586.
Eucalyptus marginata, disease control, *Phytophthora cinnamomi* 8170.
Eutypa armeniaca, *Vitis vinifera*, *Prunus armeniaca*, spores dispersal 1152.
Phytophthora cinnamomi, *Eucalyptus tetradonta*, stands 359.
Pinus sylvestris, association nutrient dynamics 5601.
Pythium, fungicides, disease control, *Daucus carota* 8116.
tobacco mosaic virus, tobacco ringspot virus, enzyme-linked immunosorbent assay detection, *Fraxinus americana* 8951.
wound infection, *Cytospora*, pruning, *Prunus persica* 8805.
- Dieffenbachia maculata**, *Myrothecium roridum* leafspot, temperature effects on 6255.
Phytophthora mexicana stem rot 1154.
rot, *Erwinia chrysanthemi* 5447.
- Dietary intake**, aflatoxins, effects on energy utilization, proteins utilization, ducks 3721.
safety, mycotoxins contamination, man, reviews 7045.
sucrose, effects on dental plaque removal, man 4969.
- Diethyl phthalate**, biodegradation, aquatic microorganisms 7837.
biodegradation, xenobiotics, inhibition, exudates, aquatic microorganisms 8687.
- Diethylamine**, induction mutation, *Aspergillus flavus*, characterization, effects on aflatoxins biosynthesis 7084.
- Diethylether**, + Tween 80, influenza A virus disruption 4076.
- Diffusion tests**, measuring techniques, antibody response, *Aspergillus fumigatus* 2533.
microinulin resistance, *Staphylococcus aureus* 4712.
- Digestibility**, straw, silage, urea treatment, sheep 1067.
- Digestion (aerobic)**, animal wastes, oxygenation 4108.
industrial effluents, breweries, *Candida* 6701.
manure, effects on nutritive value, feeds, chickens 6201.
pigs animal wastes, storage, anaerobic conditions, digestion (anaerobic) 7507.
sewage sludge, environmental hygiene 2366.
sewage sludge, indicator species mortality, temperature 1485.
waste treatment, industrial wastes, microorganisms 547.
waste treat.ment, manure 9230.
wastewater treatment, lagoons, landfills leachates 7516.
- Digestion (anaerobic)**, acetic acid, methanogenesis, inhibition, 2-bromoethanesulfonate 7524.
agricultural wastes, pathogens reduction, *Fusarium oxysporum*, *Corynebacterium michiganense* 8390.
animal wastes + cellulose, cattle 7513.
animal wastes, cattle 7505.
animal wastes, cattle, wastewater treatment, mesophilic bacteria 7519.
animal wastes, conversion, electricity, methanogenesis, ethanol production 5275.
animal wastes, methanogenesis, pigs 7514.
animal wastes, methanogenesis, reactors design, methane use 5699.
animal wastes, pigs 6702.
aromatic compounds, reviews 7830.
bacteria inhibition, methanogenesis, methanogenic bacteria 9036.
biomass, methanogenesis 5820.
biomass retention 4122.
bioreactors, coal, wastewater treatment 4109.
bioreactors, design, reviews 1488.
bioreactors, wastewater treatment 4110.
cheese whey, reactors, methane production 3197.
Citrus, wastewater treatment, characterization 4117.
crop residues, phytotoxins reduction, soil microorganisms decomposition, *Hordeum distichon* 2836.
fermentation kinetics, methane production, bioreactors 4404.
fermenters, methane production 420.
industrial effluents, distilleries, methanogenesis 2185.
industrial effluents, pulp mills, *Clostridium butyricum* 3204.
industrial wastes, methanogenesis, use, aquaculture, *Basidiomycetes* culture 84.
leaves, extracts 1070.
manure, pigs, thermophilic bacteria, mesophilic bacteria, methane production 7523.
mathematical models, wastewater treatment 9235.
mesophilic bacteria, animal wastes, methanogenesis 7517.
methane biosynthesis, energy resources, reviews 8271.
methane, measuring techniques, equipment 7503.
methane production 4116.
methane production, bioreactors 3557.
methanogenesis, analysis, monitoring 5698.
methanogenesis, animal wastes, cattle 7504.
methanogenesis, biomass, nitrogen sources effects on, *Ulva*, *Gracilaria tikvahiae* 8396.
methanogenesis, bioreactors design, methane quality 5700.
methanogenesis, bioreactors effluents, wastewater treatment 5827.
methanogenesis, books 5940.
methanogenesis, food processing, industrial wastes, use food drying, + solar radiation 7489.
methanogenesis, food processing wastes, *Beta vulgaris* 6691.
methanogenesis, food processing wastes, *Coffea arabica* 7515.
methanogenesis, hydrolysis, biomass, *Spirulina maxima* 1232.
methanogenesis, industrial effluents, molasses fermentation 8401.
methanogenesis, inhibition, antibiotics residues, feces 8396.

gestion (anaerobic), (continued)

methanogenesis, lignocelluloses, crop residues 5696.
 methanogenesis, manure, reactors design 5824.
 methanogenesis, mathematical models, monitoring 5702.
 methanogenesis, methane composition, hydrogen sulfide, corrosion 5701.
 methanogenesis, methanogenic bacteria 5821.
 methanogenesis, methanogenic bacteria 9233.
 methanogenesis, Methanotherix, characterization 3981.
 methanogenesis, peat, hydrolysis, aerobic bacteria, bioreactors 7303.
 methanogenesis, peat, reviews 5273.
 methanogenesis, physicochemical properties 5822.
 methanogenesis, reactors design, surveys, Europe 7639.
 methanogenesis, sewage sludge + *Spirulina maxima* biomass 1293.
 methanogenesis, sodium chloride, ammonium chloride, inhibition 6693.
 methanogenesis, straw, *Oryza sativa*, effects on digestibility, cattle 7875.
 methanogenesis, volatiles fatty acids, food processing, industrial wastes 5704.
 methanogenesis, waste treatment, immobilized cells, manure, chickens 7518.
 methanogenesis, wastewater treatment 5825.
 methanogenesis, wastewater treatment, kinetics, mathematical models 4900.
 methanogenesis, yield assays, biomass 5697.
 methanogenic bacteria, algae biomass, methanogenesis production 2183.
 methanogenic bacteria, industrial effluents toxicity 1483.
 methanogenic bacteria, methanogenesis, spectroscopy, bioassays 8269.
 methanogenic bacteria, toxicity, chloroform, cyanide, industrial effluents 2376.
 microorganisms, animal wastes, oxygen, effects on, methanogenesis 8407.
 oranges, industrial wastes, food processing 6699.
 organic acids production, conversion, carbon monoxide, methanol, *Butyrivibrio* methylophilicum 3418.
 pasteurization, sewage sludge, land disposal 2351.
 pH, measuring techniques 6666.
 pig, animal wastes + cellulose substrates 2339.
 pigs animal wastes, storage, anaerobic conditions, digestion (aerobic) 7507.
 reactors, methanogenesis, mathematical models, animal wastes, chickens 8394.
 research programs recommendations 1506.
Saccharum officinale stillage, fermenters, mechanisms 1861.
 sewage sludge, alkalinity monitoring 1747.
 sewage sludge, bacteria, biodegradation, measuring techniques 4438.
 sewage sludge, pathogens, *Salmonella*, combustion, pollution control 2368.
 sewage sludge, pH, organic acids effects on 2352.
 sewage treatment, mechanisms 3189.
 sludge, methanogenesis 5844.
 slurries, methanogenesis 8395.
 slurries, pigs, factors affecting, inactivation, vaccinia virus, enterovirus (bovine) 6684.
 temperature, effects on, methanogenesis, *Methanotherix*, *Methanosarcina* 3980.
Trichoderma reesei, organic acids production, biomass 3417.
 waste treatment, glucose, bicarbonate, acetic acid, effects on 3191.
 waste treatment, industrial wastes, methanogenesis, microorganisms 547.
 waste treatment, manure, cattle 9226.
 waste treatment, mass spectroscopy, monitoring, methanogenesis 1458.
 waste treatment, methanogenic bacteria, fluorescence, monitoring 4104.
 waste treatment, microorganisms, methodology, books, conferences 8500.
 wood biodegradation, methanogenesis 5831.
 wastewater treatment 6681.
 wastewater treatment 6685.
 wastewater treatment 7520.
 wastewater treatment, animal wastes, pigs 7521.
 wastewater treatment, biodegradation, toxicity, pulp mills, industrial effluents, methanogenic bacteria 6669.
 wastewater treatment, bioreactors 4921.
 wastewater treatment, bioreactors, mathematical models 558.
 wastewater treatment, methanogenesis, industrial effluents, food industry 8405.
 wastewater treatment, methanogenesis, inhibition, phenol, aromatic compounds 4680.
 wastewater treatment, *Methanosarcina barkeri* 4123.
 wastewater treatment, monitoring, computer applications, mathematical models 6705.
 wastewater treatment, reviews, bibliographies 4907.
 wastewater treatment, role *Eichhornia crassipes* 4106.
 wastewater treatment, sulfate removal 4899.
 waste biodegradation, energy resources, batch culture, microorganisms 3655.
negative tract,
Culicimorys clavisporus infection, ultrastructure, histopathology, biological control, larvae, *Anopheles* 2853.
gitarita pentzil,
 cell walls degradation, rumen microorganisms 4428.
(3,4-Dihydroxybutyl)guanine,
 antiviral activity, thymidine inhibition, herpes simplex virus 1, kinetics 460.
2-Dihydro- α -santonin,
 production, α -santonin hydrogenation, stereochemistry, fermentation, *Streptomyces cinereocrocutus* 5245.
3-Dihydro-3,3-dihydroxyafatoxin B1
 aflatoxins production, cross-reactivity, aflatoxin B1 3740.
3-Dihydro-4-oxo-1,8-naphthyridine-3-carboxylic acid,
 derivatives, synthesis, structure-activity relationships 7364.
hydrofolate synthetase,
 purification, characterization, *Neisseria gonorrhoeae* 5183.
hydrofolic acid,
 analogs, synthesis, antibacterial activity, *Streptococcus faecium*, *Lactobacillus casei* 5447.
hydrolinally acetate,
 biodegradation, *Pseudomonas incognita* 6957.
hydroloipamide acetyltransferase,
 pyruvate dehydrogenase (lipamide), dihydroloipamide dehydrogenase complex activity, histidine residues role, p-(bromoacetyl)-amino[phenyl] arsenoxide inhibition, *Escherichia coli* 3522.
hydroloipamide dehydrogenase,
 immobilized enzymes, α -alkanol monooxygenase (FMN-linked) + α -hydroxysteroid dehydrogenase, bioluminescence bioassays, bile acids measuring techniques 3482.
 +oxoglutarate dehydrogenase (lipamide) + dihydroloipamide succinyltransferase multienzyme complexes, mechanisms, kinetics, *Escherichia coli* 7639.
 +oxoglutarate dehydrogenase (lipamide) + dihydroloipamide succinyltransferase multienzyme complexes, thioctic acid localization, electron microscopy, *Escherichia coli* 7702.
 pyruvate dehydrogenase (lipamide), dihydroloipamide acetyltransferase complex, activity, histidine residues role, p-(bromoacetyl)-amino[phenyl]

Dihydroloipamide dehydrogenase, (continued)

arsenoxide inhibition, *Escherichia coli* 3522.
 substrates, amino acid composition, *Pseudomonas putida*, comparison *Escherichia coli* 6831.
Dihydroloipamide succinyltransferase,
 +oxoglutarate dehydrogenase (lipamide) + dihydroloipamide dehydrogenase multienzyme complexes, mechanisms, kinetics, *Escherichia coli* 7639.
 +oxoglutarate dehydrogenase (lipamide) + dihydroloipamide dehydrogenase multienzyme complexes, thioctic acid localization, electron microscopy, *Escherichia coli* 7702.
Dihydromethylethylomycin A,
 cleavage, structure 7476.
Dihydrostreptomycin,
 sterilization, radiation 1378.
4-Dihydrotrispore B,
Blakeslea trispora, biosynthesis 1849.
9-(1,3-Dihydroxy-2-propoxy[methyl]-guanine,
 +interferon, inhibition DNA biosynthesis, herpes simplex virus 2 6480.
9-(1,3-Dihydroxy-2-propoxymethyl)guanine,
 antiviral activity, Epstein-Barr virus replication inhibition 4761.
 effects on, macromolecules biosynthesis, herpes simplex virus 1, herpes simplex virus 2, infected, HeLa cells 9125.
 + Interferon, replication, antiviral activity, cytomegalovirus (human) 9115.
Dihydroxyacetone kinase,
 purification, characterization, *Candida boidinii* 1781.
2,4-Dihydroxyphenylalanine,
 monophenol monooxygenase hydroxylation, *Basidiomycetes* 890.
3,4-Dihydroxyphenylalanine,
 +reduction, tyrosine phenol-lyase, *Citrobacter freundii* 5.
2,4-Dihydroxyphenylethylamine,
 monophenol monooxygenase hydroxylation, *Basidiomycetes* 890.
9-(2,3-Dihydroxypropyl)adenine,
 antiviral activity, vesicular stomatitis virus infection, cell culture 465.
Dikaryons,
 mycorrhizas, recombination, *Typhula incarnata*, infectivity, *Hordeum vulgare* 2788.
Uromyces appendiculatus, comparison, monokaryons, virulence, *Phaseolus vulgaris* 2780.
Diketopiperazine,
 chemical modification, bicyclomycin synthesis 8371.
Diluents,
 viability, *Escherichia coli*, *Salmonella typhimurium*, *Staphylococcus aureus*, effects on 5073.
Dilution,
 methodology, *Haemophilus* isolation, lung, pigs, slaughter 2463.
Dilution tests,
 aminoglycoside antibiotics, *Pseudomonas aeruginosa* 1408.
 antibiotic sensitivity testing, bactericidal activity, *Staphylococcus aureus* 7425.
 antibiotic sensitivity testing, clinical isolates, laboratories, comparison 483.
 antibiotic sensitivity testing, methodology, comparison, gram-negative bacteria 7621.
 antibiotic sensitivity testing, *Mycoplasma*, animal isolates, chickens 3087.
 antibiotic tolerance, oxacillin, comparison, *Staphylococcus aureus* 6435.
 comparison, agar diffusion test, bactericidal activity, azlocillin, ticarcillin, *Pseudomonas aeruginosa* 4841.
 drug sensitivity testing 2238.
 measuring techniques, use, autoSCAN-3 3049.
 micromethods, *Staphylococcus*, antibiotic resistance, use sodium chloride containing Mueller-Hinton agar 3012.
 oxacillin resistance, *Staphylococcus* 4713.
Dimerization,
 4-hydroxy-2-oxoglutarate aldolase, phosphoric acid, *Escherichia coli* 1789.
Dimeric,
 beef curly top virus, isolation, characterization 3241.
Dimethioate,
 antimicrobial activity, soil microorganisms 1325.
1-(2,4-Dimethoxybenzyl)-4-methoxycarbonyl-3-phthalimido-2-azefludione,
 chemical modification, enhancement, antibacterial activity 3115.
Dimethyl sulfoxide,
 identification chloride peroxidase substrates, *Caldariomyces fumago* 904.
Dimethyl sulfoxide reductase,
Saccharomyces cerevisiae, methionine sulfoxide inhibition, word 6941.
Dimethyl 2-methyl-3-oxosuccinic acid,
 reduction, methyl 2-methylmalates biosynthesis, *Saccharomyces cerevisiae*, *Candida albicans* 3551.
Dimethyl 3-benzoyloxycarbonylaminoalicyclic acid,
 hydrolysis, bacteria, enzymes stereoselectivity, production, precursors, carbapenems, negamycin 2308.
3,10-Dimethyl-10-H- α -triazolo[4,3'-2,3] α -triazino-[5,6-b]indole,
 antiviral activity, herpes simplex virus 1 4023.
7,12-Dimethylbenz[a]anthracene,
 Cunninghamella elegans metabolism, metabolites analysis 424.
7,12-Dimethylbenz[a]anthracene-trans-3,4-dihydrodiol,
 analysis, 7,12-dimethylbenz[a]anthracene metabolism, *Cunninghamella elegans* 424.
7,12-Dimethylbenz[a]anthracene-trans-8,9-dihydrodiol,
 analysis, 7,12-dimethylbenz[a]anthracene metabolism, *Cunninghamella elegans* 424.
Dimethylphenylalanine,
Candida humicola, identification methodology 3359.
Dinitrogenase reductase,
 inactivation, characterization, *Rhodospirillum rubrum* 1774.
2,4-Dinitrophenol,
 bactericidal activity, *Desulfovibrio vulgaris* 3057.
 biodegradation, ozonation, wastewater treatment 1480.
2,4-Dinitrosalicylic acid,
 assays, sugars, lignocelluloses hydrolysis 8680.
2,4-Dinitrotoluene,
 conversion, wastewater treatment, activated sludge 7493.
Dioctyl phthalate,
 biodegradation, *Bacillus* 2723.
Dioxyctria amatelia,
 biological control, *Bacillus thuringiensis* 8645.
Dioscorea,
Fusarium solani infection, effects on diosgenin levels 7172.

- Dioscorea alata**,
cytopathology, *Dioscorea* ring mottle virus, Togo 3828.
leafspot, *Colletotrichum*, factors affecting yield 4588.
- Dioscorea ring mottle virus**,
cytopathology, disease transmission, Aphididae, host range, *Dioscorea alata*, Togo 3828.
- Dioscorea rotundata**,
oxalic acid levels, fungi infection 6281.
- Diosgenin**,
levels, *Dioscorea*, *Fusarium solani* infection effects on 7172.
- Dioxidine**,
cell membranes, effects on, *Staphylococcus aureus*, *Micrococcus lysodeikticus* 8306.
- 2,4-Dioxohexahydro-1,3,5-triazine**,
antiviral activity, potato virus X 4775.
inhibition, soil microorganisms 3970.
- Dipeptides**,
antimicrobial activity 9142.
peptide synthesis, β -chloro-D-alanine, propargylglycine, containing, antibacterial activity 4736.
- Diphyas robinlioides**,
leaves, fungi inoculation, phytoalexins production 5519.
- Diopocarpus roseae**,
black spot, disease resistance, plant breeding, *Rosa* 8096.
- Diplodia**,
fruit rot, pathogenicity 7162.
- Diplodia macrospora**,
dioliposin biosynthesis, radioactive labelling 3744.
- Diplodia natalensis**,
post-harvest decay, *Citrus sinensis*, polygalacturonase characterization 7198.
stem rot, post-harvest decay, oranges, disease control, fungicides 5470.
- Diplody**,
determination methodology, *Saccharomyces* 9333.
- Diosporin**,
biosynthesis, radioactive labelling, *Diplodia macrospora* 3744.
- Diprotina**,
Bacillus cereus, isolation, physicochemical properties, structure 6804.
- Dipalide test**,
bacteriuria, detection 7574.
- Diptera**,
disease transmission, public health, solid wastes, bacteria, fungi, viruses 2361.
- Disaccharides**,
+tetrapeptides binding, lysozyme, effects on tryptophan residues, fluorescence, page T4 7706.
- Disc-diffusion test**,
antibacterial activity, ceftizoxime+water 4046.
antibiotic sensitivity testing, apicalin, quality control 7439.
antibiotic sensitivity testing, cefotaxime, bacteria 1387.
antibiotic sensitivity testing, cephalosporins, clinical isolates, bacteria 4819.
antibiotic sensitivity testing, methodology, *Legionella* 7418.
antibiotic sensitivity testing, potency, association, quality control 7421.
antibiotic sensitivity testing, *Pseudomonas aeruginosa*, aminoglycoside antibiotics, statistical analysis 479.
antibiotic sensitivity testing, standardization, quality control 8348.
antibiotic sensitivity testing, ticarcillin+clavulanic acid, bacteria, clinical isolates 5774.
cefamandole, antibiotic resistance, gram-negative bacilli 8292.
detection, *Staphylococcus aureus*, methicillin, antibiotic resistance 7346.
fortimicin A, bacteria 531.
lincomycin production, *Streptomyces lincolnensis* 7445.
netilmicin, quality control 3073.
norfloxacin, bacteria, standardization, quality control 3047.
petri dishes, antibiotic sensitivity testing, bacteria, factors affecting 2245.
quality control, *Staphylococcus aureus*, azlocillin antibacterial activity 2262.
vancomycin, comparison, potassium hydroxide suspensions, identification, aerobic bacteria, rods 3262.
- Discomycetes**,
fruit bodies, food sources, India 6192.
- Discocephalum eucalypti**,
Eucalyptus marginata canker, pathology 370.
- X-Disease**,
Spiroplasma citri isolation, disease transmission vectors, *Colladonus montanus*, *Scaphytopius nitridus* 8021.
- Disease control**,
Acremonium coenophialum infection, *Festuca arundinacea*, seed treatments 1227.
agricultural practices, biological control, plant diseases 1188.
Agrobacterium tumefaciens, crown gall, salicylic acid, acetyl/salicylic acid, *Nicotiana tabacum* 7217.
Aleyrodids, vectors, yellow mosaic virus, plant diseases, *Phaseolus aureus* 3878.
Alternaria nitens, *Lobelia erinus*, seed treatments, steam 2062.
anomia, *Phymatolithum omnivorum*, root rot, *Gossypium hirsutum* 5523.
antifungal agents, *Plasmiodiophora brassicae*, clubroot, disease resistance, *Brassica* 8912.
antiseptics, surgery, environmental hygiene, hospitals 1518.
Ascochyta blight, *Cicer arietinum*, fungicides 3883.
Ascochyta rabiei blight, *Cicer arietinum*, seed-borne diseases, reviews 3905.
Ascochyta rabiei, disease transmission, *Cicer arietinum* seedlings, benomyl, thiabendazole 1969.
bacteria speck, mancozeb+cupric hydroxide, *Lycopersicon esculentum* 6310.
benomyl, *Sclerotinia*, crown rot, stem rot, *Medicago sativa* 5527.
blight, *Xanthomonas campestris* pv. *malvacearum*, β -lactam antibiotics, *Gossypium hirsutum* 6315.
blue stain, *Pinus caribaea* var. *hondurensis* wood 6331.
canker, *Bortyophthora dothidea*, benomyl, pruning, *Malus pumila*, USA, Georgia 3900.
canker, *Pseudomonas syringae* pv. *morspunorum*, fatty acids copper salts, *Prunus cerasus* 344.
capitall, blight, *Coffea arabia* 4590.
carya liiroensis veins spot, *Gnomonia nersiseda*, fungicides 1137.
Citrus reticulata, fruit rot, *Bortyodiplodia theobromae* 5525.
coffee berry disease, *Coffea arabica*, fungicides, *Colletotrichum coffeanum* 5517.
Colletotrichum gloeosporioides, root, *Vitis rotundifolia* 8006.
composts, soil-borne diseases, *Rhizoctonia*, ornamental plants 6300.
cowpea banding mosaic virus, *Vigna unguiculata*, heat treatments, seed treatments 2095.
- Disease control, (continued)**
Cronartium quercum f.sp. *basilanae* rust, use, 2-iodobenzenilide, benomyl, *Pinus* 3916.
crown gall, conferences 848.
crown gall, streptomycin, CGA 78039, rootstocks, *Malus pumila* 342.
crown gall, streptomycin, vancomycin, CGA 78039, *Malus pumila* 343.
cyanamide, plants, seedlings, infection, *Rhizoctonia solani*, *Pithium debaryanum* 3886.
damping-off, downy mildew, seed treatments, *Brassica* 8141.
disease spread, quarantine, plant diseases 1193.
disinfection, medical equipment, medical supplies 1517.
downy mildew, *Peronosclerospora sorghi*, *Sorghum bicolor*, *Zea mays*, foliar applications, metalaxyl, efosite-AI 8126.
downy mildew, *Peronosclerospora sorghi*, *Sorghum bicolor*, *Zea mays*, seed treatments, metalaxyl, efosite-AI 8144.
Dutch elm disease, *Ulmus*, *Ceratocystis ulmi* 5606.
Epithoe typhae infection, *Festuca arundinacea*, seed treatments 8119.
ergot, *Penicillium americanum*, pollen management 1990.
Erwinia amylovora fire blight, *Pyrus communis* 5443.
Erwinia amylovora fire blight, *Pyrus communis*, legislation 5463.
Erwinia carotovora, blackleg, *Solanum tuberosum* tubers, heat treatments 1195.
Erysiphe graminis f.sp. *hordei*, powdery mildew, avirulent strains, inoculation, *Hordeum vulgare* 2066.
Erysiphe polygoni infection, *Pisum sativum* 8107.
Festuca arundinacea, blight, *Rhizoctonia*, fungicides 8172.
fireblight, host plants, reviews 7166.
fungi plant diseases, fungicides foliar applications, *Glycine max*, USA, Georgia 8118.
fungi, soil amendment, sewage sludge composts, crops 5488.
fungicides, *Allium cepa*, bulb rot, *Bortyris alii* 326.
fungicides, *Alternaria macrospora* infection, *Gossypium barbadense*, yield association 321.
fungicides, *Alternaria tenuis* albinism, *Citrus* seedlings 1219.
fungicides, antibiotics, plant diseases 1221.
fungicides applications, *Lolium perenne*, seeds yields 8108.
fungicides, *Bortyris cinerea*, shoot blight, *Pistacia vera* 2896.
fungicides, fungi infection, *Triticum aestivum*, yield, USA, Idaho 7951.
fungicides, *Fusarium culmorum*, susceptibility, *Gramineae* 2895.
fungicides, *Malus*, powdery mildew, *Podosphaera leucotricha* 5516.
fungicides, *Mycosphaerella fijiensis*, plant diseases, *Musa sapientum*, *Musa paradisica* 8914.
fungicides, plant diseases 1215.
fungicides, post-harvest decay, oranges, stem rot, green mold 5470.
fungicides, resistance, phytopathogenic fungi, mathematical models, plant diseases 439.
fungicides, tomatoes, post-harvest decay, *Geotrichum* 1168.
Fusarium culmorum infection, *Lolium perenne*, use, calcium peroxide, comparison, carbendazim, drazoxolon 1203.
Gossypium hirsutum, root rot, *Phymatolithum omnivorum*, soil temperature+water potential 8009.
gram-negative bacteria contamination, *Gossypium*, climatic conditions effects on 4532.
Hemelia vastatrix, leaf rust, *Coffea*, cuprous oxide, cupric hydroxide 8123.
Humulus lupulus downy mildew, *Pseudoperonospora humuli*, comparison, disease resistance cultivars, pruning, fungicides, reviews 1770.
insecticides, *Myzus persicae*, vectors, potato leaf roll virus infection, *Solanum tuberosum* 2065.
leaf blight, *Septoria tritici*, *Triticum aestivum*, powdery mildew, *Erysiphe graminis*, *Hordeum vulgare*, use, antitranspirants 291.
leafspot, *Arachis hypogaea*, *Cercospora arachidicola*, *Cercosporidium personatum* 3793.
management, plant diseases 1216.
mancozeb, *Raphanus sativus*, white rust, downy mildew 2902.
mastic, corrosion, cow's milk, penicillin, guinaifodol, antibacterial activity, *Staphylococcus*, *Streptococcus* 5773.
mastitis, milking machines disinfection, cattle 3260.
melon necrotic spot virus infection, *Cucumis sativus* 6314.
metalaxyl, *Theobroma cacao*, pod rot, *Phytophthora palmivora* 5526.
molds, *Gramineae*, reviews 5430.
Mucor, postharvest decay, tomatoes 5472.
Nectria cinnabarina canker, benomyl, *Gleditsia triacanthos* var. *inermis* 3915.
nosocomial infection, epidemiology, hospitals, environmental hygiene 1521.
papaya post-harvest decay, hot water 5469.
parenteral nutrition, man 2419.
pathogens, design, laboratories 1523.
pathogens, disease transmission, occupational hazards, laboratories 1522.
penicillin, post-harvest decay, lemon 1071.
peritonitis, U.V. radiation, decontamination, dialysis, man 6718.
Peronosclerospora sorghi downy mildew, *Sorghum bicolor*, crop rotation, tillage 1175.
Phoma betae infection, seedlings, *Beta vulgaris* 8851.
phytoalexins inducers, *Helminthosporium oryzae* brown spot, *Oryza sativa* seedling 287.
phytopathogenic fungi, crop residues, composting 2842.
Phytophthora cinnamomi, dieback, *Eucalyptus marginata* 8170.
Phytophthora cinnamomi, seedlings immersion, water temperature, *Pinus radiata* 7219.
Phytophthora fragariae infection, use, fumigation, comparison, fungicides drenches, *Fragaria* 1182.
Phytophthora parasitica root rot, *Lycopersicon esculentum*, metalaxyl, sulfadoxim 5532.
plant diseases, cost-benefit analysis, research programs 1192.
plant diseases, mathematical models 1105.
plant diseases, phytopathogenic fungi, *Glycine max*, pesticide applications association rainfall 1220.
plant diseases, plant breeding, books 1692.
plant diseases, plant viruses, tissue culture 5397.
plant diseases, research programs, international organizations 1194.
plastics films, autopsy, man 2421.
powdery mildew, fungicides effects on soil microorganisms, plants 2078.
powdery mildew, use, fungicides, *Citrus*, *Gramineae*, *Turkey* 337.
Prunus, plant diseases, new records 339.
Prunus necrotic ring spot virus mosaic disease, enzyme-linked immunosorbent assay, *Prunus avium*, USA, Washington 3812.
public health, environmental hygiene, conferences 1501.
Pycularia oryzae, blast, oxytetracycline, streptomycin, *Oryza sativa* 7215.

Disease control, (continued)

Pythium aphanidermatum damping-off, *Lycopersicon esculentum*, benomyl, demosan, captan 1228.
 Pythium ultimum damping-off, *Fusarium solani* f.sp.pisi root rot, use, *Trichoderma viride*-fungicides, *Pisum sativum* 338.
 Rhizoctonia solani root rot, 1-methylpyrazole carboxanilides, structure-activity relationships, *Gossypium hirsutum* 5531.
 Root rot, fungicides, Nephrolepis viticaneos, chemical control, carbofuran, thiarolo, *Oryza sativa* 2072.
 Root rot, soil amendment, sawdust, oil cake, *Triticum aestivum* 8088.
 Scab, use, captan, Malus pomila, residues 8925.
 Scab, Venturia naequalis, sterols inhibitors, Malus 3881.
 Sclerotinia sclerotiorum, white mold, canopies effects on, *Phaseolus vulgaris* 7930.
 Seed treatments, fungicides, leaf rust, stripe rust, *Triticum aestivum* 2904.
 Sewage sludge, soil amendment, crown gall, *Rubus* 310.
 Sheath blight, Rhizoctonia solani, benzoxypyridazines, *Oryza sativa* 5534.
 Soil amendment, fungicides, *Solanum tuberosum*, plant diseases, Globodera rostochiensis, Verticillium dahliae 8121.
 Soil pasteurization, Trifolium subterraneum, damping-off, root rot, *Fusarium avenaceum*, Pythium 6301.
 Soil-borne diseases, phytopathogenic fungi, soil amendment, sewage sludge composts 311.
Solanum tuberosum late blight, Phytophthora infestans, use, ofurace controlled-release granules 2887.
 Solar radiation, *Lycopersicon esculentum*, stem canker, Didymella lycopersici 2847.
 Solar radiation, Plasmodiophora brassicae clubroot, Brassica oleracea, Brassica rapa 292.
 Solar radiation, soil-borne diseases, Macrophomina phaseolina, Sclerotium rolfsii 2845.
 Stalk rot, Erwinia chrysanthemi, klorocin, Zea mays, tissues, persistence 8929.
 Streak, role, resistance association Eriophyes tulipae, *Triticum aestivum* 8075.
 Suppressive soils, phytopathogenic fungi, soil-borne diseases 332.
 Tradimeton, powdery mildew, *Triticum aestivum*, correlation disease resistance plant breeding, Erysiphe graminis 5502.
 Verticillium dahliae infection, use, irrigation+metam+sodium, *Solanum tuberosum*, effects on yield 1209.
 Vigna unguiculata damping-off, fungicides, herbicides soil applications effects on 2090.
 Vitis vinifera powdery mildew, sulfur applications 340.
 Wilt, Cercarotycis fimbriata, disease resistance, rootstocks, pruning, Brazil, Mangifera indica 5440.
 Xanthomonas campestris pv.malvacearum, blight, *Gossypium hirsutum*, reviews 3846.

Disease reservoirs,
 crop residues, *Solanum graminearum*, overwintering, stalk rot, USA, Minnesota, Zea mays 7987.
 Fusarium oxysporum blight, weeds, Glycine max 8770.
 Hop stunt disease virus plant diseases, Humulus lupulus, epidemiology 4545.
 Phakopsora pachytrichi, rust, host range, host alternation, Leguminosae 7940.
 Soil, colonization Beauveria bassiana, Metarrhizium anisopliae, biological control, Curculio caryae 5263.
 Soil-borne diseases, *Corynebacterium michiganense* subsp.michiganense, canker, crop residues, *Lycopersicon esculentum* 8872.
 Soil-borne diseases, Pythium aphanidermatum, baiting substrates, seeds, Cucumis sativus 8763.
 Taraxicum officinale, tomato ringspot virus, stem pitting, Prunus persica, USA, Pennsylvania 8811.

Disease resistance,
 Agrobacterium tumefaciens crown gall, plant breeding, Vitis amurensis, x Vitis vinifera 8906.
 Agrobacterium tumefaciens crown gall, screening, plant breeding, inheritance, Vitis amurensis x Vitis vinifera 8908.
 Agropyron, infection, barley yellow dwarf virus, wheat streak mosaic virus, control, Curculio caryae 8089.
 Albigo candida, association inheritance Act7 locus, Brassica napu 2854.
 Arachis hypogaea, Aspergillus flavus infection, cultivars comparison 7086.
 Arachis hypogaea, black rot 8105.
 Arachis hypogaea cultivars germplasm, peanut mottle virus infection 8061.
 Arachis hypogaea, Cylinodradium cotralariae black rot, crop rotation effects on 5430.
 Arachis hypogaea, Cylinodradium cotralariae black rot, plant breeding 1171.
 Arachis, leafspot, Cercospora arachidicola 5491.
 Ascochyta pinodella blight, inheritance, plant breeding, *Pisum sativum* 5477.
 Ascochyta rabiei blight, germplasm screening, plant breeding, Cicer arietinum 8093.
 Bacteria, ring rot, *Solanum tuberosum* 4559.
 Barley yellow dwarf virus, Avena 5414.
 Barley yellow dwarf virus, inheritance, plant breeding, Avena sativa x Avena sterilis 8072.
 Barley yellow mosaic virus, plant breeding, Hordeum vulgare 4569.
 Barley yellow mosaic virus, cultivars, Phaseolus vulgaris 1208.
 Bean, plant breeding, crops 2867.
 Blackleg, Erwinia carotovora subsp.atroseptica, screening projects, *Solanum tuberosum* 5483.
 Blight, Xanthomonas campestris pv.malvacearum, plant breeding, *Gossypium hirsutum* 2832.
 Blight, Xanthomonas campestris pv.manihoti, Elaeis brasiliensis infection, plant breeding, cultivars, Manihot esculenta 5497.
 Botrytis allii rot, plant breeding, Allium cepa 5479.
 Brassica, antifungal agents, disease control, clubroot, Plasmodiophora brassicae 8912.
 Breeding, Avena sativa, Erysiphe graminis f.sp.avenae powdery mildew 307.
 Breeding, Hordeum vulgare, Puccinia hordei leaf rust 301.
 Breeding, Lactuca sativa, Bremia lactucae downy mildew 295.
 Breeding, Tulipa, Fusarium oxysporum f.sp.tulipae bulb rot 299.
 Bremia lactucae downy mildew, cultivars, Lactuca sativa 3841.
 Brown rust, Puccinia recondita, inheritance, *Triticum aestivum* 2836.
 Capsicum annuum, crown rot, blight, Phytophthora capsici 5508.
 Capsicum chacoense, spot, Xanthomonas campestris pv.vesicatoria 4582.
 Cercarotycis rodmanni, Acremonium zonatum, aromatic compounds, antifungal activity, storage cells, leaves, Eichhornia crassipes 8813.
 Characterization, Coffea, Hemileia vastatrix leaf rust 306.
 Characterization, Hemileia vastatrix leaf rust, Coffea canephora 305.
 Charcoal rot, Macrophomina phaseolina, Sorghum bicolor 8890.

Disease resistance, (continued)

Cicer arietinum, plant breeding, blight, Ascochyta rabiei 3865.
 Citrus, overwintering, Phytophthora citrophthora 5509.
 Cladosporium cucumerinum, cell walls hydroxyproline levels, lignin deposition, Cucumis sativus 7205.
 Coffee berry disease, Colletotrichum coffeanum, plant breeding, Coffea arabica 2873.
 Colletotrichum corchorum, X radiation, seed treatments, Corchorus capsularis 2905.
 Colletotrichum dematium, anthracnose, inheritance, *Lycopersicon esculentum* 2851.
 Colletotrichum legumenarum anthracnose, *Fusarium oxysporum* wilt, plant breeding, cultivars, Citrus latifolius 6905.
 Components, Septoria nodorum glume blotch, *Triticum aestivum* seedlings 302.
 Compounds, antifungal activity, Cercarotycis ulmi, Dutch elm disease, Ulmus americana 366.
 Corynebacterium insidiosum wilt, Medicago sativa, effects on phosphorus uptake 3870.
 Cronartium quercuum f.sp.fusiforme, fusiform rust, necrosis ultrastructure, embryos, Pinus taeda 362.
 Cronartium ribicola, rust, virulence strains, Pinus monticola, USA, Oregon 8949.
 Cross-protection, induction resistance, reviews, plants 5484.
 Cucumber mosaic virus, plant breeding, Nicotiana tabacum, Taiwan 5480.
 Cucumis melo germplasm, *Fusarium oxysporum* f.sp.melonis infection 313.
 Cultivars, Humulus lupulus, downy mildew, disease control, reviews 1170.
 Damping-off, Philippines, Nicotiana tabacum 7179.
 Downy mildew, Peronospora parasitica, turnip mosaic virus, genetic analysis, seedlings, Lactuca campestris 2855.
 Downy mildew, plant breeding, cultivars, Lactuca sativa 8901.
 Drechslera oryzae, brown spot, Oryza sativa seedlings, heavy metals salts effects on 2077.
 Dutch elm disease, blister rust, canker, plant breeding, Ulmus, Pinus, Cypressus sempervirens 2870.
 Ear rot, Gibberella zeae, screening projects, Zea mays 4580.
 Erwinia amylovora, fireblight, plant breeding, cultivars, Pyrus communis 8062.
 Erwinia carotovora soft rot, plant breeding, germplasm, *Solanum tuberosum* 7210.
 Erwinia carotovora subsp.atroseptica, blackleg, *Solanum tuberosum* 2225.
 Erysiphe graminis f.sp.hordei, powdery mildew, correlation enzyme polymorphism, plant breeding, Hordeum spontaneum 7209.
 Erysiphe graminis f.sp.hordei, powdery mildew, plant breeding, Denmark, Hordeum vulgare 2880.
 Erysiphe graminis f.sp.tritici powdery mildew, plant breeding, *Triticum aestivum* 8067.
 Erysiphe graminis f.sp.tritici, powdery mildew, *Triticum dicoccoides* 5415.
 Eucalyptus, rust, Puccinia psidii 5594.
 Festuca arundinacea inheritance, Drechslera sorokiniana infection 6290.
 Fungi, blights, viruses, plant breeding, Glycine max 5473.
 Fusarium moniliforme, seeds infection, plant breeding, Zea mays 8074.
 Fusarium oxysporum f.sp.apii yellows, inheritance, Apium graveolens 8066.
 Fusarium oxysporum f.sp.elaedis, wilt, plant breeding, Eleaio guineensis 2871.
 Fusarium oxysporum f.sp.vasinefectum, wilt, terpenoids, roots exudates, *Gossypium hirsutum* 8883.
 Fusarium, root rot, selection, plant breeding, Trifolium pratense 6292.
 Fusarium roseum, dry rot, tubers, *Solanum tuberosum* 8826.
 Fusarium wilt, Meloidogyne infection, plant breeding, *Lycopersicon esculentum* 2864.
 Fusarium wilt, *Solanum tuberosum* 1146.
 Fusiform rust, Cronartium quercuum f.sp.fusiforme, density effects on, Pinus elliotii 8187.
 Fusiform rust, Cronartium quercuum f.sp.fusiforme, seedlings, Pinus elliotii 2921.
 Gene frequency, plant breeding, Hordeum vulgare 2863.
 Genes, host-pathogen interactions, pathogenicity genes, Erysiphe graminis, powdery mildew, Hordeum vulgare 2861.
 Genes, host-pathogen interactions, races, Puccinia graminis, Puccinia recondita, virulence genes, plant breeding, *Triticum aestivum* 2858.
 Genes, Lactuca sativa, host-pathogen interactions, virulence genes, Lactuca sativa 2840.
 Genes, linkage analysis, Lactuca sativa 5474.
 Genes, plant breeding, Phaseolus vulgaris, halo blight, Pseudomonas phaseolicola 5481.
 Genetic analysis, Avena sativa, crown rust, Puccinia coronata f.sp.avenae 3868.
 Germplasm, plant diseases, plant breeding, 2877.
 Gibberella zeae, ear rot, zearalenone, 4-deoxynivalenol, production, plant breeding, hybrids, Zea mays 1180.
 Gladiolus, crown rot, *Fusarium* 2063.
 Glume blotch, Septoria nodorum, plant breeding, *Triticum aestivum* 2833.
 Glycine max, Cercospora sojae leafspot, Rcs gene 1172.
 Gnomonia leptostyla, anthracnose, relationship, 5-hydroxy-1,4-naphthoquinone, hydroglucose glucoside, Juglans nigra 3855.
 Helminthosporium carbonum, suppression, Helminthosporium maydis inoculation, Zea mays 1169.
 Hemileia vastatrix, leaf rust, genotype-environment interactions, host-pathogen interactions, plant breeding, Coffea arabica, Coffea canephora 2872.
 Hemileia vastatrix rust, plant breeding, Coffea arabica 6289.
 Heterobasidium annosum, fertilization effects on, Picea abies, Pinus sylvestris 8169.
 Hordeum, powdery mildew, Erysiphe graminis 5501.
 Hordeum vulgare, barley yellow dwarf virus effects on, Pyrenophora teres net blotch, Rhynchosporium secalis leaf blotch 1196.
 Hordeum vulgare, Erysiphe graminis infection, genetic control 2067.
 Hordeum vulgare, powdery mildew, genetic analysis, plant breeding association 8081.
 Hordeum vulgare races, Puccinia hordei host range 1995.
 Horticulture crops, Dematophora necatrix root rot 2073.
 Host-pathogen interactions, epidemiology, plant breeding, crops 2866.
 Humulus lupulus, Verticillium albo-atrum colonization 7207.
 Inducers, plant diseases, phytopathogenic fungi, bacteria, plant viruses 4571.
 Induction, Bremia lactucae downy mildew, Lactuca sativa 308.
 Inoculation, inoculation, avirulent Erysiphe graminis f.sp.hordei, mildew, Hordeum vulgare 3882.
 Inheritance, Botrytis cinerea, Didymella applanata, plant breeding, Rubus idaeus 3869.
 Inheritance, Bremia lactucae downy mildew, Lactuca sativa, field trials 303.
 Inheritance, Cicer arietinum, *Fusarium oxysporum* f.sp.ciceri wilt 236.
 Inheritance, *Lycopersicon*, Phytophthora nicotianae f.sp.nicotianae, foot rot, root rot 296.

Disease resistance, (continued)

inheritance, *Plasmiodiophora brassicae* clubroot, *Brassica napus*, *Brassica oleracea* 300.
 inheritance, *Puccinia graminis* stem rust, *Triticum aestivum* 6293.
 inheritance, *Puccinia polysora* rust, *Zea mays* 8071.
 interferon like proteins, plants 6288.
Kabatella caulovora, scorch, varieties, plant breeding, *Medicago* 6291.
 leaf rust, inheritance, plant breeding, seedlings, *Secale cereale* 8907.
 leaf rust, *Triticum aestivum*, genetic control 2054.
 leaf streak, *Mycosphaerella fijiensis*, plant breeding, *Plantago major* 8077.
 leaves *Cladosporium caryigenum*, host-pathogen interactions, *Cladosporium caryigenum*, scab, *Carya illinoensis* 3814.
 leaves, observation methods, *Sorghum* 5426.
Linum usitatissimum, *Melampsora lini* rust, India 3875.
 Lycopersicon esculentum, alfalfa mosaic virus infection 309.
 maize dwarf mosaic virus, field trials, plant breeding, *Zea mays* 5495.
 maize dwarf mosaic virus infection, *Zea mays*, genetic control 2838.
 maize dwarf mosaic virus, transfer, genetic analysis, *Zea mays* 4584.
 maize dwarf mosaic virus, *Zea mays* germplasm comparison 8091.
Malus pumila, *Botryosphaeria dothidea* canker 1200.
Malus pumila, *Venturia inaequalis* scab, plant breeding 2835.
Medicago sativa, anthracnose, *Colletotrichum trifolii* 5499.
Medicago sativa, host-pathogen interactions, *Phytophthora megasperma* 8887.
Medicago sativa, leafspot, screening 8087.
Medicago sativa, plant breeding, *Phoma medicaginis* black stem 4572.
Medicago sativa, ultrastructure, host-pathogen interactions, *Phytophthora megasperma* 8888.
Mentha piperita stems, *Vectiridium dahliae* distribution 7204.
Musa, sigatoka, plant breeding, *Mycosphaerella fijiensis* var. *difformis* 3870.
 mutagenesis, *Xanthomonas campestris* var. *oryzae* *Xanthomonas campestris* *oryzae*, *Oryza sativa* 5475.
Oryza sativa, leaf scald, *Rhynchosporium oryzae* 5504.
Oryza sativa seedlings, Drechslera sorokiniana inoculation 7201.
Oryza sativa, sheath blight, *Rhizoctonia solani* 7147.
 pathogenicity, *Fusarium roseum*, *Cladosporium cucumerinum*, lignin deposition 7206.
 pepper mottle virus, *Capsicum annuum*, pepper mild mottle virus infection, new records 4586.
Phaeosul Schweinitzii infection, *Coniferales* callus culture 2826.
Phaseolus vulgaris, clover yellow vein virus infection, inoculation methodology effects on 8103.
Phaseolus vulgaris genotypes, web blight, *Rhizoctonia microsclerotia* 8060.
Phaseolus vulgaris plant breeding, *Uromyces phaseoli* rust 3857.
Phaseolus vulgaris, *Rhizoctonia solani*, root rot 1174.
Phaseolus vulgaris, tobacco mosaic virus infection, relationship, leaves sucrose content, light 8886.
 phytopathogenic fungi, host-pathogen interactions, genotype-environment interactions, plant breeding, crops 2865.
 phytopathogenic fungi, host-pathogen interactions, mathematical models, population density, plant diseases 2772.
 phytopathogenic fungi, host-pathogen interactions, plant breeding, *Vitis vinifera*, *Coffea*, *Cocos*, *Ficus* 2869.
 phytopathogenic fungi, *Triticum aestivum*, antifungal activity, alka-2,4-dienal, α -tritenone, β -tritenone 6305.
Phytophthora capsici, *Capsicum annuum* leaves, peroxidase activity 2844.
Phytophthora cryptogea root rot, *Alternaria carthanae* leaf blight, plant breeding, *Carthamus tinctorius* 6296.
Phytophthora cryptogea root rot, screening, environmental factors, *Carthamus tinctorius* 7970.
Phytophthora infestans haustoria, callose growth, tubers, *Solanum tuberosum* 2008.
Phytophthora megasperma f.sp. *glycinea*, Rps1 gene, linkage, metribizinc resistance, Rm gene, *Glycine max* 3064.
Phytophthora palmivora, relationship, benzyl isothiocyanate, *Carica papaya* 3861.
 Pierce's disease, cultivars, plant breeding, *Vitis vinifera* 8068.
 Pierce's disease, plant breeding, cultivars, *Vitis vinifera* 8064.
Pinus monticola, blister rust, *Cronartium ribicola* 5595.
Pinus ponderosa, needle blight, USA 8941.
Pinus ponderosa, *Sclerotinia blight* brown spot, analysis methodology 3925.
Pinus virginiana, pitch canker, *Fusarium moniliforme* var. *subglutinans* 5599.
Pisum sativum, epicotyl rot epicotyl rot 6287.
Pisum sativum, Erysiphe polygoni powdery mildew 1978.
Pisum sativum, polygalacturonase inhibitors, phytopathogenic fungi 7203.
Pisum sativum, *Rhizoctonia stem* rot, factors affecting 1199.
Pisum sativum, root rot, *Aphanomyces euteiches*, stem rot, *Rhizoctonia solani*, plant breeding 2852.
 plant breeding 2856.
 plant breeding, Africa, conferences, books 9349.
 plant breeding, *Cajanus cajan* 8899.
 plant breeding, *Cicer arietinum*, blight, *Ascochyta rabiei* 3864.
 plant breeding, conferences 3396.
 plant breeding, crops 2875.
 plant breeding, crops 8893.
 plant breeding, developing countries, *Solanum tuberosum* 2874.
 plant breeding, etiology, plant diseases 1184.
 plant breeding, genetic engineering 1186.
 plant breeding, germplasm, *Brassica campestris* 8065.
 plant breeding, host-pathogen interactions, genotype-environment interactions, reviews, crops 2868.
 plant breeding, host-pathogen interactions, reviews 3871.
 plant breeding, microorganisms, research programs 1176.
 plant breeding, models 2859.
 plant breeding, *Oryza sativa* 2881.
 plant breeding, *Oryza sativa* 8896.
 plant breeding, phytopathogenic fungi, *Pennisetum americanum* 8894.
 plant breeding, research programs, Brazil, *Triticum aestivum* 2878.
 plant breeding, reviews 2883.
 plant breeding, reviews 4576.
 plant breeding, reviews 8095.
 plant breeding, reviews 8892.
 plant breeding, rice dwarf virus, *Oryza sativa* 7202.
 plant breeding screening projects, *Prunus persica*, inoculation methodology, *Cytophora leucostoma* 5487.
 plant breeding screening projects, *Triticum aestivum* seedlings, wheat mosaic virus 4574.
 plant breeding, *Sorghum* 8897.
 plant breeding, *Triticum aestivum*, powdery mildew, plant breeding correlation triadimol disease control, *Erysiphe graminis* 5502.

Disease resistance, (continued)

plant breeding, tropical environment, long-term effects, crop protection, agricultural ecosystems 1177.
 plant breeding, USA, crops 2879.
 plant breeding, *Vigna unguiculata* 8898.
 plant breeding, yellows, *Pennisetum clandestinum* 294.
 plant breeding, Zambia, *Triticum aestivum* 2877.
 plant breeding, *Zea mays* 8895.
 plant cells culture, host-pathogen interactions, role phytoalexins, reviews 2056.
 plant diseases, plant breeding 1187.
 plant diseases, plant breeding 1189.
 plant diseases, plant breeding 1190.
 plant diseases, plant breeding, cost-benefit analysis 1191.
 plant diseases, *Pyrularia oryzae*, spore germination, inhibition, caffeic acid, superoxide, free radicals 8899.
 plant diseases, segregation, genes 4579.
 plant viruses, plants, interferon like compounds 4573.
 plant viruses, *Solanum*, plant breeding 2837.
 plant viruses, vegetables, plant breeding 3856.
Populus, *Melampsora medusae* infection, light, temperature effects on 360.
Populus, *Melampsora medusae* leaf rust 2107.
Populus tremuloides, stem canker, *Hymphoxylon mammatum* 8174.
 potato virus M, *Solanum glaucophyllum*, inheritance 6294.
 potato virus X, plant breeding, varieties, *Solanum tuberosum* 8884.
 powdery mildew, *Erysiphe carthagenensis*, host-pathogen interactions, inheritance, plant breeding, *Cucurbita moschata* 3862.
 powdery mildew, *Erysiphe graminis*, *Hordeum vulgare* 5498.
 powdery mildew, *Erysiphe graminis* f.sp. *hordei*, plant breeding, germplasm, *Hordeum vulgare* 5496.
 powdery mildew, plant breeding, *Hordeum* 2839.
 powdery mildew, role necrosis mutation, *Hordeum vulgare* 3854.
 powdery mildew, *Sphaerotheca pannosa* var. *persicae*, genetic analysis, *Persica* 4570.
 powdery mildew, sporulation, measuring techniques, selection, plant breeding, *Secale cereale* 2827.
 powdery mildew, virulence, host-pathogen interactions, plant breeding, *Hordeum vulgare* 2862.
 proteinase inhibitors, phytoalexins, plants 8900.
 protoplasts, plant viruses, plant breeding 3766.
Pseudocercospora helminthoides, cytopathology, histopathology, *Triticum aestivum* 7976.
Pseudocercospora helminthoides eye spot, genes, *Aegilops ventricosa*, transfer, *Triticum aestivum* 8078.
Pseudomonas glycinea, *Glycine max* leaves, hypersensitive response 319.
Pseudomonas solanacearum, wilt, cross-resistance, *Meloidogyne*, *Solanum sparsipilum* 8097.
Pseudomonas syringae pv. *tomato*, plant breeding, cultivars, *Lycopersicon esculentum* 1179.
Pseudomonas syringae tabaci wildfire, *Alternaria alternata* brown spot, inheritance, plant breeding, callus culture, *Nicotiana glauca* 317.
Puccinia coronata, crown rust, *Avena sterilis* 4577.
Puccinia coronata, genetic screening, *Avena sativa* 5489.
Puccinia coronata leaf rust, *Lolium culicoides* 3874.
Puccinia graminis f.sp. *scalis*, rust, plant breeding, *Hordeum vulgare* 8073.
Puccinia graminis f.sp. *tritici*, rust, host-pathogen interactions, lectins, germ tubes, protoplasts, *Triticum aestivum* 8092.
Puccinia graminis f.sp. *tritici*, stem rust, *Agropyron elongatum*, transfer, recombination, *Triticum aestivum* 314.
Puccinia graminis f.sp. *tritici*, stem rust, epidemiology, Austria, *Triticum aestivum* 6291.
Puccinia graminis f.sp. *tritici*, stem rust, inheritance, Sr gene, *Triticum aestivum* 315.
Puccinia helianthi induction, leaf rust, stem rust, *Triticum aestivum* 293.
Puccinia hordei, host-pathogen interactions, rust, *Puccinia hordei*, models, *Hordeum vulgare* 2860.
Puccinia hordei, hybridization, Pa3 gene, Pa7 gene, *Hordeum vulgare* 8063.
Puccinia recondita f.sp. *tritici*, factors affecting, *Triticum aestivum* 3957.
Puccinia recondita, *Triticum aestivum*, characterization 4578.
Puccinia striiformis stripe rust, gene transfer, plant breeding, *Triticum dicoccoides* \times *Triticum durum*, *Triticum aestivum* 3860.
Puccinia striiformis, stripe rust, genes, chromosomes location, *Triticum aestivum* 2834.
Puccinia striiformis stripe rust, inheritance, plant breeding, *Triticum* 5476.
Puccinia tritici, brown rust, *Triticum aestivum* 5486.
Pyrularia oryzae blast, inheritance, *Oryza sativa* 5493.
Pyrularia oryzae blast, *Oryza sativa* 1128.
Pyrularia oryzae blast, polygenic inheritance, *Oryza sativa* 6297.
Pythium debaryanum infection, role, symptomless infection, *Gibberella zeae*, *Nigrospora oryzae*, *Zea mays* seeds 8792.
Rhizoctonia solani root rot, *Phaseolus vulgaris*, genetic control, inheritance 2069.
Rhizoctonia solani stem rot, *Pisum sativum* 1201.
Rhizoctonia solani, tubers, glycoalkaloids, levels, *Solanum tuberosum* 8840.
Rhynchosporium secalis scab, *Erysiphe graminis* powdery mildew, *Helminthosporium teres* blotch, genetic variance, plant breeding, *Hordeum vulgare* 316.
 rice ragged stunt virus, *Oryza sativa* varieties, Thailand 8100.
 role mannosones isolation, antifungal activity, *Ceratocystis ulmi*, Dutch elm disease, *Ulmus americana* 3926.
 root rot, inheritance, *Triticum* 2885.
 rootstocks, disease control, *Ceratocystis fimbriata*, wilt, Brazil, *Mangifera indica* 5440.
 Rpm gene, downy mildew, *Glycine max*, *Peronospora manshurica* races virulence 12.
 rust, brome mosaic virus infection effects on, *Triticum aestivum* 283.
 rust, *Phaseolus vulgaris*, cultivars, comparison, sporulation, incidence 8082.
 rust, plant breeding, research programs, *Triticum aestivum* 2876.
 rust, *Uromyces appendiculatus*, *Phaseolus vulgaris*, inheritance 2850.
 rust, *Uromyces phaseoli*, races virulence, *Phaseolus vulgaris* 2846.
Sclerotinia tritici plant diseases, selection, *Medicago sativa* 5485.
Sclerotium cepivorum, *Allium*, *Zephyranthes*, *Habranthus* 8043.
Sclerotium cepivorum white rot, *Allium cepa*, *Allium porrum*, screening projects 3866.
 screening projects, *Ascochyta rabiei* blight, *Cicer arietinum* 3863.
 screening projects, genetic analysis, *Lycopersicon esculentum*, speck, *Pseudomonas syringae* pv. *tomato* 5482.
 screening projects, isoenzymes, plant breeding 3872.
 screening projects, *Phytophthora cryptogea*, plant breeding, *Carthamus tinctoria*

Disease resistance, (continued)

7188.
smut, Ustilago hordei, genetic analysis, pathogenicity, host-pathogen interactions, models, plant breeding, *Hordeum vulgare* 2857.
Solanum tuberosum, gangrene, *Phoma exigua* 2070.
Solanum tuberosum, Phytophthora infestans infection, correlation papillae 6303.
Solanum tuberosum, soft rot, *Erwinia carotovora* subsp. *atroseptica*, *Erwinia carotovora* subsp. *carotovora* 4581.
speck, *Pseudomonas syringae* pv. *tomato*, genes, inheritance, *Lycopersicon* 2828.
Sphaerotheca pannosa mildew, *Diplocarpon roseae* black spot, plant breeding, *Rosa* 5096.
Sphaerotheca pannosa powdery mildew, plant breeding, *Rosa multiflora* 8904.
spraying, *Solanum tuberosum*, Denmark 8910.
Sterium gausapatum, suberin characterization, defense mechanism, *Quercus robur* 7235.
Streptomyces ipomoea, screening projects, *Ipomoea batatas* 4583.
stripe rust, inheritance, growth stage, vegetative cells, *Triticum hybrids* 2886.
Tobacco etch virus, plant breeding, cultivars, *Capsicum annuum* 2849.
tobacco etch virus, potato virus Y, cultivars, *Capsicum annuum* 8707.
tobacco etch virus, potato virus Y, pepper mottle virus, plant breeding, cultivars, *Capsicum annuum* 8909.
toxins, *Uromyces oxysporum* f.sp. *medicaginis*, polyploidy, regeneration, cell lines, *Medicago sativa* 5434.
Triticum aestivum genotypes, leaf rust, powdery mildew, effects on yield, fungi 8098.
Triticum aestivum genotypes, pathogenesis, stem rust, *Puccinia graminis* f.sp. *tritici* 8885.
Triticum aestivum, leaf rust, *Puccinia recondita* f.sp. *tritici*, genetic control, lines, *Medicago sativa* 5434.
Triticum aestivum, leafspot, *Bipolaris sorokiniana* 5492.
Triticum aestivum, powdery mildew, genetic control 8101.
Triticum aestivum, take-all, manganese deficiency effects on, *Gaeumannomyces graminis* 8099.
Triticum, *Erysiphe graminis* f.sp. *tritici*, *Puccinia recondita* f.sp. *tritici*, *Septoria nodorum* 1197.
urdbaeen leaf crinkle virus, plant breeding, *Vigna radiata* 2071.
Uromyces viciae-fabae, rust, plant breeding, *Vicia faba* 2882.
Ustilago nuda var. *tritici*, loose smut, plant breeding, *Triticum aestivum*, *Triticale* 1183.
variation, *Coffea arabica*, *Hemileia vastatrix* leaf rust 304.
Verticillium wilt, *Myosphaerella sentina* leafspot, *Pyrus amygdaliformis*, *Pyrus communis* 8080.
Verticillium albo-atrum wilt, cytogenetics *Medicago sativa* 2884.
Verticillium dahliae wilt, *Lycopersicon esculentum*, plant breeding 2068.
Verticillium wilt, plant breeding, cultivars, *Lycopersicon esculentum* 1178.
Vicia faba, screening projects, plant breeding, bean yellow mosaic virus 3873.
Vicia faba, *Uromyces viciae-fabae* 1198.
Vigna unguiculata, tobacco necrosis virus, sunn-hemp mosaic virus, nutrition effects on 312.
wilt, *Fusarium oxysporum* f.sp. *ciceris*, gene regulation, *Cicer arietinum* 3867.
wilt, *Fusarium oxysporum* f.sp. *niveum*, agricultural practices, wilt 2848.
wilt, *Pseudomonas solanacearum*, germplasm, *Solanum sucrense*, *Solanum tuberosum* 8090.
wilt, *Pseudomonas solanacearum*, root rot, *Phytophthora capsici*, plant breeding, *Capsicum annuum*, *Capsicum frutescens* 8094.
Xanthomonas campestris pv. *oryzae*, blight, *Oryza sativa* 6298.
Xanthomonas campestris pv. *vesicatoria*, speck, plant breeding, cultivars, *Lycopersicon* 2829.
Xanthomonas campestris pv. *vignicola* blight, *Vigna unguiculata* 8891.
Xanthomonas campestris spot, plant breeding, *Capsicum annuum* 8903.
Zea mays genotypes, aflatoxins contamination, *Aspergillus flavus* 8880.
Zea mays, host-pathogen interactions, *Erwinia chrysanthemi* 3880.
zucchini yellow mosaic virus, inheritance, zym gene, linkage analysis, *Cucumis melo* 5478.

Disease spread,

Campylobacter, poultry, surfaces, kitchens 8429.
disease control, quarantine, plant diseases 1193.
phytopathogenic fungi, plant diseases, mathematical models 7127.
plant diseases, measuring techniques, computer applications, remote sensing, video imaging 236.
plant diseases, phytopathogenic fungi, computer applications 6220.
Rigidoporus lignosus, root rot, host-pathogen interactions, kinetics, *Hevea brasiliensis* 5604.
rust, *Glycine max*, association, economics 7944.
rust, *Hemileia vastatrix*, Western Hemisphere, *Coffea* 2798.
rust, *Cladosporium carpopophilum*, conidia release, environmental factors 272.
Sirococcus clavigerenti-juglandacearum canker, *Juglans cinerea* plantations 7991.
strain composition, *Neovectitis*, *Oryza sativa* 7153.
Vicia faba, epidemiology, bean yellow mosaic virus, subterranean clover red leaf virus, vectors, Aphididae 5405.

Disease tolerance,

Glycine max, plant breeding, heritability, root, *Phytophthora megasperma* f.sp. *glycines* 8085.

Glycine max, root, *Phytophthora megasperma* f.sp. *glycines* 8086.

selection, *Glycine max*, plant breeding, root, *Phytophthora megasperma* f.sp. *glycines* 8079.

Disease transmission,

Abaca mosaic virus, banana mosaic virus, vectors, *Aphis gossypii*, *Musa textilis* 6278.
Aeromonas salmonicida, role survival, rivers fresh water, furunculosis, *Salmonidae* 4937.
airborne microorganisms, plant diseases, conferences 6797.
Aphididae, association, helper factor, tobacco etch virus, *Nicotiana tabacum* 4552.
Ascochyta rabiei, *Cicer arietinum*, seedlings, disease control, benomyl, thiabendazole 1989.
bean pod mottle virus, *Cerotoma trifurcata*, population density, distribution, *Glycine max* 243.
Bemisia tabaci, tomato leaf curl virus, infection, *Lycopersicon esculentum*, association, environmental factors 8022.
Bemisia tabaci, watermelon mosaic virus 2, squash mosaic virus, epidemiology, *Cucumis melo*, *Cucurbita pepo*, USA, California 3821.
blood transfusion, hepatitis B, non-A, non-B hepatitis, acquired immune deficiency syndrome, identification, radioimmunoassay, methodology, man 648.
brome mosaic virus, urediniospores, *Puccinia graminis* f.sp. *tritici*, *Puccinia*

Disease transmission, (continued)

recondita f.sp. *tritici*, leaf rust, stem rust, *Triticum aestivum* 2789.
brome mosaic virus, urediniospores, *Puccinia graminis* f.sp. *tritici*, stem rust, *Triticum aestivum* 2790.
Cicadellidae, Delphacidae, viruses, mycoplasma-like organisms, *Oryza sativa* 7156.
cowpea aphid-borne mosaic virus, *Aphis craccivora* vectors, *Vigna unguiculata* infection resistance 7137.
cucumber green mottle mosaic virus, vectors, *Raphidopalpa fevicolis*, *Lagenaria siceraria*, *Cucurbita pepo* 8850.
cucumber mosaic virus infection, *Medicago sativa*, etiology 2787.
cucumber mosaic virus, mosaic disease, *Cucumis melo* 8819.
Cucurbita, squash leaf curl virus, vector-borne diseases, *Bemisia tabaci*, characterization 1150.
Dioscorea ring mottle virus, Aphididae, host range, *Dioscorea alata*, *Togo* 3828.
enterovirus, ground water, reviews 2385.
Epichloe typhina infection, *Festuca arundinacea*, USA, Kentucky 7979.
epidemiology, *Legionella pneumophila*, water supplies 3214.
Erwinia amylovora fire blight, *Pyrus communis*, vectors, *Aphis* 5442.
Erwinia salicis, Watermark disease, propagules, *Salix alba* 363.
grapevine virus A, plant diseases, *Vitis vinifera*, vectors, *Pseudococcus longispinus* 3844.
little leaf, rickettsia-like organisms, mycoplasma-like organisms, treatment, *Wissadula periplocifolia*, Jamaica 2047.
maize streak virus, *Auchenorrhyncha*, *Zea mays* 7154.
Myzus persicae, plant diseases, potato virus Y, β -fenesene derivatives effects on 5407.
Myzus persicae, soybean mosaic virus infection, *Glycine max* 1973.
Myzus persicae, tomato yellow top virus, host range, *Solanaceae* 7180.
pathogens, disease control, occupational hazards, laboratories 1522.
plant viruses, mycoplasma-like organisms, vectors, Delphacidae, Cicadellidae 7157.
plant viruses, Nematoda vectors 6217.
plant viruses, vectors, Delphacidae, Cicadellidae 7130.
Plasmiodiophora brassicae clubroot, *Brassica napus*, *Brassica oleracea*, disease resistance inheritance 300.
potato leaf roll virus, *Myzus persicae* vectors, pathogenicity, host range 4553.
potato leaf roll virus, potato virus Y, role, *Myzus persicae*, *Aphis gossypii*, *Solanum tuberosum* 8023.
potato virus Y, heredity, *Myzus persicae*, *Aphis gossypii*, *Datura metel* 3827.
ribonucleoproteins, role, tobacco mosaic virus, characterization 8862.
Scaphytopius caudus, plant viruses infection, bud proliferation, *Glycine max*, USA, Louisiana 4510.
solid wastes, bacteria, fungi, viruses, public health, Rodentia, Diptera 2361.
strawberry latent ringspot virus, arabis mosaic virus, *Xiphinema diversicaudatum*, plants 6272.
tobacco streak virus, seed-borne diseases, *Fragaria vesca* 6267.
tomato ringspot virus, *Xiphinema californicum*, role, *Pyrus* 4529.
Triticum aestivum 2790.
viruses, *Spiloplasma citri*, isolation, yellows, X-disease, *Colladonus montanus*, *Scaphytopius nitridus* 8021.
Verticillium dahliae, *Solanum tuberosum* 7183.
viruses levels, waste water, reviews 2334.
viruses, reviews, Rubus 8004.
water supplies, hospitals, *Legionella pneumophila*, Legionnaire's disease, *Legionella micdadei*, Pittsburgh pneumonia agent 5854.
watermelon mosaic virus, foliar application, oils, *Cucurbita pepo*, *Myzus persicae* 6277.
watermelon mosaic virus, plant diseases, *Cucumis sativus*, *Lagenaria siceraria*, Morocco 6270.

Diseases,

ornamental plants, trees, books 840.

phytopathogenic fungi, India, conferences 2547.

Disinfectants,

acrylic acid derivatives, structure-activity relationships, antibacterial activity, gram-positive bacteria, gram-negative bacteria 7551.
antibacterial activity, antifungal activity 6719.
antibacterial activity, surfaces types, *Pseudomonas aeruginosa* 5862.
+anticoagulant agents, bactericidal activity 456.
antifungal activity, solutions, contact lenses 5870.
antimicrobial activity 9137.
antimicrobial activity, methodology 1524.
antiviral activity, retrovirus (avian), infectious bursitis virus 4026.
antiviral activity, rotavirus (human) 2232.
bacteria, viruses, wastewater treatment, chlorine, residues 4938.
biodegradation, acclimatization, activated sludge 4112.
dialysis, disease control, peritonitis, clinical trials, man 6721.
hepatitis B virus inactivation 472.
iodine, antiviral activity, African swine fever virus 1345.
monochloramine, antibacterial activity, antifungal activity 5865.
povidone-iodine, bactericidal activity 7548.
quaternary ammonium compounds, inhibition, proteolytic enzymes, *Bacillus subtilis* 4957.
solutions, contamination, *Staphylococcus*, *Corynebacterium*, fungi, contact lenses 5871.

Disinfection,

alcohols 1509.
amphoteric surfactants 1515.
anionic surfactants 1514.
antifungal agents, fungistats 1342.
antiseptics, skin microflora, animal models 4141.
antitubercular agents, *Mycobacterium tuberculosis* 1319.
bacteria, drinking water distribution systems 8416.
bacteria, reviews 2236.
blood culture, use cotton, role, transmission, *Bacillus* contamination 3223.
books 1695.
bronchoscopes 578.
chloramines, pH effects on 9246.
chlorhexidine 1511.
chlorine derivatives 1506.
chlorine resistance, *Escherichia coli* 9041.
chlorine, resistance, spores, *Bacillus*, *Clostridium*, food industry 6413.
chlorine, synergism, chlorine dioxide, ozone, peracetic acid, sewage effluents, poliovirus 1 6694.
chlorine, temperature effects on, parvovirus 6484.
chlorine, waste water, ponds, fecal coliforms 6671.
dentistry, environmental hygiene 1519.

Diseinfection, (continued)

- disease control, medical equipment, medical supplies 1517.
drinking water, bacteria, association, *Hyalella azteca*, methodology, characterization 6712
drinking water, swimming pools, sewage effluents 1500
efficiency, ammonifying bacteria detection methodology, use filter paper 7542.
fiberoptic bronchoscopes, *Mycobacterium tuberculosis* contamination 3221.
glutaraldehyde 1362.
hand, prophylaxis, viruses food-borne diseases, man 9266.
heat + hydrogen peroxide, septic tanks effluents 9243.
hydrogen peroxide, oxidants 1510.
hydraulic pressure, temperature effects on, inactivation, *Escherichia coli* 5666.
hygiene, sterilization, breweries 7547.
iodine derivatives 1507.
milking machines, mastitis disease control, cattle 9260.
nitrogen containing compounds 1512.
ozone, waste water 6672.
ozone, wastewater treatment, microbial pollution, enterovirus 2372.
pathogens, sewage sludge, environmental hygiene 2365.
pathogens, wastewater treatment 550.
peracetic acid, sewage effluents, enterovirus, rotavirus, phages 6695.
phenols 1508.
Pseudomonas, environmental hygiene 1516.
quaternary ammonium compounds 1513.
radiation, bacteria, fishery products, feeds 5359.
γ radiation, sewage sludge, coliforms, *Pseudomonas*, *Bacillus* 5823.
rotavirus (simian) SA11 inactivation, chlorine, chlorine dioxide, monochloramine 8324.
sewage sludge, biotechnology 2364.
sewage sludge, conferences, books 2542.
sewage sludge, radiation 551.
Staphylococcus aureus, lactic acid bacteria antagonism, hospitals 3227.
swimming pools, sodium hypochlorite, books 838.
thimerosal, formaldehyde, fungi pathogens, antigens extracts, clinical microbiology 8140.
U.V. radiation, coliforms enumeration methodology, waste water 9263.
U.V. radiation, wastewater treatment 2337.
U.V. radiation, water, phase II, *Escherichia coli*, *Candida parapsilosis*, kinetics models 568.
waste water, reviews 1478.
wastewater treatment, reviews, bibliographies 4909.
water, use, ammonium, association, glass 7527.

Dissociation

biological control, hyperparasitism, powdery mildew, *Erysiphe* 8911.

Dissolved oxygen

- aeration, fermenters, penicillin fermentation, immobilized cells, *Penicillium chrysogenum* 7435.
biodegradation, organic matter, biochemical oxygen demand, biomass, microorganisms, ATP, waste water, feeds 1454.
cell culture, *Candida guilliermondii* 5060.
coefficients, determination methodology, bacteria continuous culture 668.
diffusion, mathematical models, activated sludge 9239.
effects on dehydrogenase activity, activated sludge 4095.
electrodes, fermenters 5877.
immobilized cells, effects on nitrogen fixation, *Azotobacter vinelandii* 3550.
levels, activated sludge kinetics, mathematical models 1464.
levels, electrochemistry, diagnosis, bacteriuria, antibiotic sensitivity testing, aerobic bacteria 8345.
levels, mathematical models, fermentation 8502.
levels, temperature effects on, culture, *Bacillus stearothermophilus* 9296.
levels, wastewater treatment, activated sludge, abattoirs effluents 6668.
mass spectroscopy, media (culture), fermenters 5873.
monitoring, computer applications, methanol addition, batch culture, fermentation, *Pseudomonas* 8633.
nitrogen fixation, effects on, *Azotobacter vinelandii* 3551.
oxygen consumption, mathematical models, activated sludge 6690.
sensors, monitoring, fermentation 6114.
transfer, kinetics, mathematical models, fermentation 6118.
uptake, soil microorganisms, toxicity testing 398.

Distamycin A

- analogs, synthesis, antiviral activity, structure-activity relationships, herpes simplex virus, influenza virus 6472.

Distilleries

- effluents, *Pseudomonas aeruginosa*, *Vibrio cholerae*, chemotaxis, coastal waters 560.
enzymes, ethanol fermentation 161.
industrial effluents digestion (anaerobic), methanogenesis 2185.
industrial effluents, nutrient requirements, urea, sodium phosphate, *Bacillus* 5818.
industrial effluents, wastewater treatment, rotating discs, pump 2341.
single-cell protein production, *Saccharomyces cerevisiae*, *Torulopsis* *intermediolans* 865.

Diterpenes

- Nicotian glutinosa, inhibition *Erysiphe cichoracearum*, powdery mildew, foliar applications, *Nicotiana tabacum* 2076.

Dithene M45

- antifungal activity, *Macrophoma mangiferae* 4587.

1-(1,3-Dithian-2-yl)-2-hydroxypropane

- formation, 1-(1,3-dithian-2-yl)-2-oxopropane reduction, *Geotrichum candidum*, *Aspergillus niger* 8631.

1-(1,3-Dithian-2-yl)-2-oxopropane

- reduction, 1-(1,3-dithian-2-yl)-2-hydroxypropane, formation, *Geotrichum candidum*, *Aspergillus niger* 8631.

Dithioglycol

- stabilization penicillin amidase immobilized enzymes 74.

Dithioethanol

- reduction, sarcosine oxidase, kinetics, *Corynebacterium* 6642.
stabilization penicillin amidase immobilized enzymes 74.

Diurnal variation

- nitrogenase activity, *Oryza sativa* roots 5674.

α-Diversonolic acid

- structure, biosynthesis, *Penicillium diversum* 3421.

p-Diversonolic acid

- structure, biosynthesis, *Penicillium diversum* 3421.

Dizygotheca elegantissima

- leopard, *Alternaria panax* 5450.

DNA

- antibiotics binding, solvents role 9175.
antigen T binding sites, SV40, monoclonal antibodies, immunoassays 589.
avian laryngotracheitis virus, isolation, purification, methodology 9284.
bacteriophage flow cytometry methodology 3287.
base composition, bacteria, methodology 3298.
binding, acalcomycin A, physicochemical properties 956.
binding, ammonia, heterocyclic derivatives, inhibition phase λ, replication, *Escherichia coli* 4030.
binding, RNA polymerase III, ionic strength effects on, yeasts 7704.
Chlamydia trachomatis, hybridization analysis, diagnosis, methodology 9313.
citrus exocortis virus infected *Gynura aurantiaca*, separation techniques, RNA, use, *Gynura aurantiaca* 3248.
cleavage, bleomycin, talismycin analogs, structure-activity relationships 529.
cloning vectors integration methodology, plasmids, phages 628.
Cochliobolus heterostrophus, isolation methodology, organelles, plasmids 3365.
Coxsackievirus B3, use, enterovirus detection, nucleic acids hybridization analysis 4979.
cytomegalovirus (human), hybridization analysis, use, 2-acetylaminofluorene, enhancement, fluorescent probes, methodology 9282.
damage, antibacterial activity, metronidazole, *Escherichia coli* 6449.
fingerprinting, methodology, herpes simplex virus identification 8458.
Frankia, nodules, *Alnus glutinosa*, isolation, purification 4370.
gene 32 protein binding, trichloroethanol chemical modification, tryptophan residues, role, phase T4 4256.
herpes simplex virus, cytarabine incorporation, association, vidarabine drug resistance 3067.
herpesvirus, detection, electrophoresis, mammalian cells 4977.
homology, lysis phases, prophages, dairy starters, *Streptococcus cremoris* 5335.
hybridization analysis, *Escherichia coli* detection, water, enterotoxins genes probes 1087.
hybridization analysis, herpes simplex virus 1, herpes simplex virus 2, identification, membrane filters 608.
hybridization analysis, methodology, potato spindle tuber viroid identification 8451.
hybridization analysis, *Neisseria gonorrhoeae*, use, differential diagnosis, urethritis, non-specific urethritis, man 679.
hybridization analysis probes, vesicular stomatitis virus defective interfering particles detection 4987.
hybridization analysis, *Salmonella* detection, food contamination 673.
hybridization analysis, T cell leukemia virus proviruses, leukemia cells 5884.
hybridization analysis, varicella-zoster virus detection, cell culture 8452.
hybrids, *Escherichia coli*, phase λ, environmental factors mutagenicity testing 3330.
infected cells, herpes simplex virus recombinants detection 5006.
interaction, rubomycin, fluorescence analysis 6066.
interaction, saframycin R, N.M.R., structure 957.
isolation, gel chromatography, plasmids, *Escherichia coli* 3539.
leaves, leaves, *Pycnicaria oryzae*, blast, *Oryza sativa* 7978.
Micrococci lysodeikticus, cesium trifluoroacetate, use, isolation, purification, methodology 5918.
mitochondria, isolation methodology, yeasts 5086.
penicillin amidase, plasmids, transformation, *Bacillus megaterium*, production 95.
phase M2, transfection, *Penicillium islandicum* and acid effects on 9120.
plasmids, antibiotic resistance, tetracycline, restriction endonuclease mapping, *Haemophilus ducreyi* 3027.
plasmids, *Escherichia coli*, purification methodology 7598.
plasmids, protoplasts transformation, gene transfer, *Corynebacterium glutamicum* 6059.
plasmids, purification methodology 741.
plasmids, purification, precipitation, chromatography, methodology 5917.
plasmids, *Streptococcus* group N, isolation, methodology 5026.
plasmids, *Streptococcus lactis*, transformation, lactose metabolism, antibiotic resistance, *Streptococcus sanguis* 6990.
purification methodology, plasmids, *Escherichia coli* 4194.
purification methodology, *Streptomyces coelicolor* 8472.
recombinants, biotechnology, industries, books 3367.
recombination, cloning vectors, enzymes biotechnology 4297.
recombination, interferon, antiviral activity, mammalian cells 4778.
recombination, methodology, use, viruses, bacteria 841.
recombination, phase T7, cell-free system, methodology 648.
recombination products, overproduction, foot-and-mouth disease virus vaccines 5810.
recombination, vaccines production, immunogenicity, hepatitis B virus 6615.
Rickettsia prowazekii, purification, deoxyribonuclease treatment, chick embryos yolk sac 5033.
separation methodology, chromosomes, yeasts 9335.
substrates, polyvinylpyrrolidone synthesis(ATP) use, phase T4 621.
supercoiling, DNA gyrase inhibitors, nalidixic acid antibiotics reaction mechanisms, *Escherichia coli* 6560.
supercoiling, isolation, tomato golden mosaic virus infected *Nicotiana benthamiana*, methodology 6279.
SV40, transfection, Vero cells, methodology 5000.
thymidine, incorporation, bacteria, measuring techniques 5907.
viruses, genetic engineering, vaccines, reviews 8386.
viruses, silver staining, methodology 654.
yeasts, isolation methodology, use, *Oerskovia niantheolytica*.

DNA biosynthesis

- antifungal activity, metalaxyl, *Phytophthora parasitica* var. *nicotianae* 8135.

- antiviral activity, 9-(2-hydroxyethoxymethyl)guanine + vidarabine, herpes simplex virus 1 7388.

- apicidin inhibition, archaebacteria 7368.

- Bacteroides fragilis*, inhibition, metronidazole, bactericidal activity 2213.

- 2'-deoxyadenosine, 2'-deoxyguanosine inhibition, herpes simplex virus 6481.

- Escherichia coli*, *Pseudomonas putida*, polyacrylamide immobilization effects on 1614.

- herpes simplex virus infected BHK cells, 9-(2-hydroxyethoxymethyl)guanine effect on 4767.

- herpes simplex virus 2, antiviral activity,

- 9-(1,3-dihydroxy-2-propoxy)methyl-guanine + interferon 6480.

- initiation, aminoglycoside antibiotics inhibition, mechanisms, *Escherichia coli* 7468.

- marine microorganisms, measuring techniques, methodology 4143.

- precursors, nucleotides, fermentation, manganese, deficiency, effects on,

DNA biosynthesis, (continued)

- Brevibacterium ammoniagenes, *Micrococcus luteus* 951.
 ribonucleoside-diphosphate reductase, herpes simplex virus 1, vesicular stomatitis virus, antiviral activity, paracetamol, bis-N1,N8-(2,3-dehydroxybenzoyl)spermidine 8335.
- DNA gyrase,**
 inhibition DNA supercoiling, nalidixic acid antibiotics reaction mechanisms, *Escherichia coli* 6560.
 inhibitors, role, plasmid pMG110 elimination, *Escherichia coli* 5797.
- DNA polymerase**
 herpes simplex virus 1, 9-(2-hydroxyethoxymethyl)guanine, analogs, inhibition 4029.
 inhibition, antiviral activity comparison, 2'-nor-2'-deoxyguanosine, 9-(2-hydroxyethoxymethyl)guanine, herpes simplex virus 1349.
 loci, relationship, 9-(2-hydroxyethoxymethyl)guanine, resistance, herpes simplex virus 1 5723.
 purification, characterization, *Neurospora crassa* 3477.
 purification, comparison DNA topoisomerase, herpes simplex virus 1 6835.
- DNA polymerase (RNA-dependent),**
 purification, characterization, lymphadenopathy virus 5983.
- DNA repair,**
 mutants, interaction, metronidazole, *Escherichia coli* 2312.
 plasmid pKM101 effects on, *Salmonella typhimurium*, Ames test 3328.
- DNA topoisomerase,**
 purification, comparison DNA polymerase, herpes simplex virus 1 6835.
- DNA tumor viruses,**
 production, fermenters, aerosols filtration, reduction, risks, occupational exposure 8624.
- DNA-binding protein,**
 herpes simplex virus infected cells, purification, characterization 4254.
 multiple forms, N.M.R., *Escherichia coli* 2562.
 purification, characterization, *Escherichia coli* 7673.
 role, polyamines biosynthesis regulation, *Escherichia coli* 2655.
 X-ray crystallography, HeLa cells, adenovirus (human) 5 2563.
 X-ray diffraction, crystal structure, *Bacillus stearothermophilus* 7663.
- Decyl benzene sulfonate,**
 biodegradation, microorganisms, characterization 1033.
- Decylbenzene,**
 solubility, biodegradability, microorganisms 6158.
- Deimos,**
 disease control, *Carya illinoensis* veins spot, *Gnomonia nerveda*, fungicides 1137.
- Dogs,**
 animal isolates, *Campylobacter jejuni*, antibiotic sensitivity testing 9180.
 canine distemper virus, detection, counter immunoelectrophoresis 598.
 Ctenophthalmus felis, repellents, efficacy, *Saccharomyces carlsbergensis* 6092.
Escherichia coli isolates, R factors, antibiotic resistance 3010.
 urinary tract infection isolates, bacteria, antibiotic sensitivity testing 4787.
- Domestic animals,**
 aflatoxicosis, association, food contamination, reviews, historical account 7046.
 feeds, bioterrorization, *Aspergillus fumigatus* 1025.
 food poisoning, mycotoxicosis, *Fusarium*, reviews 7017.
- Domesticity,**
Alnus glutinosa, actinorrhizas, nodules, factors affecting 347.
Malus domestica, powdery mildew, *Podosphaera leucotricha*, temperature effects on 7985.
- Dothlatroma pinl,**
 needle blight, disease resistance, *Pinus ponderosa*, USA 8941.
- Dothiorella septospora,**
 needle blight, *Pinus radiata* pathology, Ecuador 5600.
- Downstream processing,**
 separation techniques, enzymes, bacteria production proteins 1600.
- Downy mildew,**
 Bremia lactucae disease resistance, breeding, *Lactuca sativa* 295.
 Bremia lactucae disease resistance, cultivars, *Lactuca sativa* 3841.
 Bremia lactucae disease resistance induction, *Lactuca sativa* 308.
 Bremia lactucae disease resistance inheritance, *Lactuca sativa*, field trials 303.
 Bremia lactucae, hypersensitive response, *Lactuca sativa* 6304.
 Bremia lactucae, *Lactuca sativa*, virulence, geographical distribution, Australia 3835.
 disease control, antibiotics-copper sulfate, *Cucumis sativus* 8139.
 disease control, salicylanilides derivatives, *Cucumis sativus* 8315.
 disease resistance, plant breeding, cultivars, *Lactuca sativa* 8901.
 Peronosclerospora sorghi, disease control, *Sorghum bicolor*, Zea mays, foliar applications, metalaxyl, metalaxyl 8126.
 Peronosclerospora sorghi, *Sorghum bicolor*, disease control, crop rotation, tillage 1175.
 Peronosclerospora sorghi, *Sorghum bicolor*, Zea mays, disease control, seed treatments, metalaxyl, fosite-AI 8144.
 Peronospora manshurica races, virulence, Glycine max, disease control, Rpm gene 1202.
 Peronospora manshurica, surveys, USA, Iowa, Glycine max 7937.
 Peronospora parasitica, disease control, seed treatments, Brassica 8141.
 Peronospora parasitica disease resistance, genetic analysis, seedlings, Brassica campestris 2855.
 Peronospora parasitica, disease resistance, plant breeding, germplasm, Brassica campestris 8065.
 Pseudoperonospora cubensis, metalaxyl resistance, strains competition, *Cucumis sativus* 341.
 Pseudoperonospora cubensis, co-sporers, incidence, Lagerania siccararia, Cucurbita moschata, India 8838.
 Pseudoperonospora humuli, Humulus lupulus, disease control, comparison, disease resistance cultivars, pruning, fungicides, reviews 1170.
 Rapium sativus, disease control, mancozeb 2902.
- Rhizospora graminicola,** disease control, metalaxyl, foliar applications, *Pennisetum americanum* 8137.
 Sclerospora graminicola, host-pathogen interactions, geographical variations, *Pennisetum americanum* 5431.
 Sclerospora graminicola, host-pathogen interactions, strains compatibility, sexual reproduction, geographical variations, *Pennisetum americanum* 7973.
 Sclerospora graminicola, pathogenicity, comparison isolates, Africa, Asia, host-pathogen interactions, *Pennisetum khipoides* 2796.
- Oxyacycline,**
 antibiotic sensitivity testing, *Escherichia coli* 7440.
 Clostridium perfringens drug sensitivity testing 3085.

Oxyacycline, (continued)

- Nocardia asteroides* antibiotic sensitivity testing 3090.
 synergism, metronidazole, tinidazole, antibacterial activity, anaerobic bacteria 7366.
- Drazoxolon,**
 disease control, *Fusarium culmorum* infection, *Lolium perenne* 1203.
- Inchilera,**
 disease control, fungicides applications, *Lolium perenne*, seeds yields 8108.
 leafspot, incidence, cultivars mixed culture, *Hordeum vulgare* 2841.
- Drechlera australiensis,**
 leafspot, symptoms, *Musa sapientum*, Egypt, new records 8002.
- Drechlera graminea,**
 infection, *Hordeum vulgare*, epidemiology, Turkey 1987.
 infection, *Hordeum vulgare*, ergosterol, use, detection 7981.
- Drechlera halodes,**
 infection, Zea mays seeds, climatic conditions 1992.
- Drechlera longirostrata,**
 infection, Zea mays seeds, climatic conditions 1992.
- Drechlera maydis,**
 infection, Zea mays seeds, climatic conditions 1992.
- Drechlera oryzae,**
 brown spot, *Oryza sativa* seedlings, heavy metals salts effects on disease resistance 2077.
- Drechlera pedicellata,**
 antagonism, *Rhizobium* growth, in vitro 7248.
- Drechlera purisepata,**
 isolation, *Eleusine coracana*, seeds, taxonomy, morphology 8048.
- Drechlera sorokiniana,**
 infection, *Festuca arundinacea* inheritance disease resistance 6290.
 inoculation, *Oryza sativa* seedlings, disease resistance 7201.
 leafspot, *Poa pratensis*, herbicides soil applications effects on 3803.
- Drechlera teres,**
 net blotch, yield, *Hordeum vulgare*, Denmark 8782.
- Drechlera tetramera,**
 infection, Zea mays seeds, climatic conditions 1992.
- Drilling fluids,**
 viscosity, enzymes, microorganisms 180.
- Drinking water,**
 aerosols, actinomycetes, allergic alveolitis, seroepidemiology, man 4932.
 bacteria analysis, USA, Nebraska 3209.
 bacteria contamination 2404.
 bacteria isolates, metals tolerance, antibiotic resistance 6433.
 carbon (activated) treatment, granules colonization, bacteria 553.
 coliforms enumeration, storage temperature effects on 564.
 coliforms recovery, membrane filtration, most probable number 6714.
 contamination, *Aeromonas hydrophila*, seasonal variations, clinical isolates correlated 8414.
 contamination, *Aeromonas*, isolation, Australia 8412.
 contamination, coliforms, copper, inhibition, growth 8417.
 detection, phages, flocculation, concentration 8413.
 detection, viruses 7533.
 disinfection 1500.
 disinfection, bacteria, association, *Hyalella azteca*, methodology, characterization 6712.
 distribution systems, bacteria disinfection 8416.
 enterovirus levels, measuring techniques 7532.
 fluoride levels, dental caries incidence, children 6728.
 fluorine, prophylaxis, dental caries, man, France 5868.
 incidence, *Pseudomonas aeruginosa*, Hungary 4839.
 Legionella isolation, chlorination association 9256.
 Legionella pneumophila, chlorine susceptibility 1327.
 Legionella pneumophila isolates, culture methodology, hospitals 789.
 Legionella pneumophila isolation, media (selective) 785.
 membrane filtration, coliforms, bacteria interference 2391.
 microbial pollution, enterovirus, rotavirus, Mexico 7526.
 microbial pollution, indicator species, coliforms, membrane filtration 8421.
 phages, use, pollution indicators, association, enterovirus microbial pollution 8425.
 plastics tubes, microorganisms films 4948.
 poliovirus contamination, samples, transport, processing, methodology 7560.
 removal, rotavirus (simian) SA11, poliovirus 1, resins adsorption 1496.
 reovirus removal, inactivation, sand filtration methodology 9253.
 survival, rotavirus (simian) SA11, water-borne diseases 7538.
 viruses analysis, Canada, urban environments 4855.
 viruses levels, detection methodology, reviews 2384.
 viruses microbial pollution, environmental monitoring, measuring techniques, reviews 2387.
 viruses recovery methodology 2393.
 water-borne diseases, reviews, bibliographies 4947.
 Yersinia survival, membrane filtration recovery 1494.
- Drought tolerance,**
Pseudotsuga menziesii, role, endomycorrhizas symbiosis, USA 2913.
- Drug addition,**
 α antigen detection, enzyme-linked immunosorbent assay methodology, serum, man 8456.
- Drug resistance,**
 antimycobacterial agents, *Mycobacterium*, reviews 9061.
 antitubercular agents, drug sensitivity testing, clinical isolates, *Mycobacterium tuberculosis* 6443.
 antitubercular agents, *Mycobacterium tuberculosis*, clinical isolates, USA, Texas 6422.
 1-8-D-arabinofuranosyl-E-5-(2-bromovinyl)uracil, varicella-zoster virus, characterization 6403.
 arabinoside, *Haemophilus*, herpes simplex virus 1, mutants, association, deoxycytosine 9068.
 bacteria, genetic control, books, conferences 3389.
 bacteria, plasmids, clinical aspects 3995.
 bacteria, reviews 9069.
 clinical isolates, *Haemophilus influenzae*, *Haemophilus parainfluenzae* 3035.
 cotrimoxazole, clinical isolates, *Shigella sonnei* 5710.
 dapsone, leprosy, man, reviews 3023.
Escherichia coli 4706.
Escherichia coli, R factors, incidence, animals isolates, clinical isolates 3021.
 R factors, *Vibrio anguillarum* 3989.
 food, isolation, food, Mexico 437.
 gene transfer, R factor RK2, gram-negative bacteria 6428.

Drug resistance, (continued)

- gram-negative bacteria, clinical isolates, animal isolates, reviews 9058.
 9-(2-hydroxyethoxymethyl)guanine, herpes simplex virus 2, detection 6473.
 Klebsiella pneumoniae, R factors, clinical isolates 3999.
 levels, Haemophilus pleuropneumoniae, animal isolates, pigs 6406.
 Mycobacterium tuberculosis 4717.
 Mycobacterium tuberculosis 4721.
 nalidixic acid, Escherichia coli, Pseudomonas aeruginosa 4700.
 nitrofurantoin, histidine ammonia-lyase induction, Vibrio cholerae 3037.
 nitrofurantoin, nitrofurantoin reductase, R factors, Escherichia coli 3029.
 norfloxacin, Escherichia coli, Pseudomonas aeruginosa 4700.
 patterns, Escherichia coli, Salmonella, R factors incidence 3039.
 patterns, Salmonella typhimurium, plasmids analysis, phage typing, clinical isolates 4690.
 plasmids incidence, Salmogardneri isolates, bacteria 9072.
 plasmids, Staphylococcus aureus, clinical isolates 4705.
 plasmids, transformation, Escherichia coli 7357.
 Providencia stuartii, nosocomial infection etiology, reviews, drug resistance, Providencia stuartii 6410.
 reviews, folic acid biosynthesis pathway inhibitors, bacteria 9053.
 Salmonella 3040.
 Salmonella, India animal isolates 3042.
 Shigella dysenteriae, clinical isolates 4715.
 Shigella flexneri, virulence, immunogenicity, vaccines 4080.
 Staphylococcus aureus, drug sensitivity testing association 2243.
 Staphylococcus aureus, plasmids spread, phages role 9070.
 structure-activity relationships 1376.
 sulfamethoxazole, clinical isolates, Escherichia coli 4004.
 trimethoprim, clinical isolates, Escherichia coli 7347.
 trimethoprim, Pseudomonas aeruginosa, characterization 9079.
 trimethoprim, role, tetrahydrofolate dehydrogenase, Escherichia coli 6429.
 trimethoprim, sulfamethoxazole, plasmids, clinical isolates urinary tract, Escherichia coli 2204.
 urinary tract bacteria, norfloxacin antibacterial activity, factors affecting 8495.
 vidarabine, herpes simplex virus, cytarabine incorporation DNA association 3067.
- Drug sensitivity testing.**
 Aeromonas salmonicida, nitrofurantoin, piromidic acid, trimethoprim, chloramphenicol, nalidixic acid 8303.
 agar dilution test 4722.
 anaerobic bacteria, inoculum preparation 4791.
 anaerobic bacteria, Micro-Media Enteric System 1329.
 antibiotic sensitivity testing, fungi 8346.
 antifungal agents, Candida albicans, Aspergillus fumigatus 8308.
 antimicrobial agents, antibacterial activity, antifungal activity, efficacy 9138.
 antimicrobial agents concentration, computer applications 4006.
 antitubercular agents, drug resistance, clinical isolates, Mycobacterium tuberculosis 6443.
 antitubercular agents, Mycobacterium fortuitum 4719.
 bacteria, animal isolates 1326.
 Bacteroides nodosus 3056.
 benomyl, Pseudocercospora herpotrichoides 3899.
 Brachyella catarrhalis, in vitro 9087.
 Candida 5735.
 Candida albicans, ketoconazole, Bay N 7133, 5-fluorocytosine 5741.
 Clostridium perfringens 3085.
 cotrimoxazole, Enterobacteriaceae, methodology 7371.
 cotrimoxazole, media (culture), bacteria 2217.
 dilution tests methodology 2238.
 Enterobacteriaceae, identification, methodology, urine specimens, man 1585.
 Escherichia coli bacteriuria isolates, identification methodology 2464.
 9-(2-hydroxyethoxymethyl)guanine, herpes simplex virus, clinical isolates 2231.
 9-(2-hydroxyethoxymethyl)guanine, herpes simplex virus, immunoperoxidase test, methodology 4771.
 inoculum preparations, anaerobic bacteria 1334.
 media (culture), methodology, bacteria 7629.
 methodology, metals resistance, bacteria 3017.
 methodology, Trichophyton mentagrophytes, Trichophyton rubrum, Candida albicans, Aspergillus niger 5735.
 metronidazole, omidazole, anaerobic bacteria, microaerophilic bacteria, clinical isolates 4731.
 Mycobacterium leprae, dapson, rifampicin 4855.
 Mycobacterium tuberculosis 1660.
 Mycobacterium tuberculosis 4717.
 Mycobacterium tuberculosis, radiometry 3051.
 Neisseria gonorrhoeae, β -lactamase production relationship 1377.
 Nocardia asteroides 3090.
 norfloxacin, gram-negative bacteria, gram-positive bacteria 9095.
 Pseudomonas aeruginosa, EDTA+tris+lysozyme, effects on, animal isolates, horses 2253.
 Sarcophaga brevicornis 5739.
 Staphylococcus aureus, drug resistance association 2243.
 Staphylococcus aureus, milk isolates, cattle 6462.

Drug tolerance.

- Mycopharrella fijensis, benomyl, carbendazim 7325.
 thiofanate-methyl, identification methodology, Fusarium 7213.

Drugs.

- antimicrobial activity, clinical trials, pharmacokinetics, pharmacology, pediatrics, reviews 5942.
 antimicrobial activity, structure-activity relationships, drug resistance 1376.
 levels, microenvironments, relationship, microorganisms growth inhibition 1352.
 microorganisms biodegradation, books 1683.
 production, genetic engineering, Saccharomyces cerevisiae, cloning vectors, methodology 7775.
 sensitivity, R factors, Escherichia coli 5718.
 treatment, urinary tract infection, bacteria, man 2212.

Dry matter.

- Candida albicans, quantification, amphotericin B effects on 3113.

Dry rot.

- Fusarium, effects on yield, Solanum tuberosum 7173.
 Fusarium roseum, disease resistance, tubers, Solanum tuberosum 8826.
 Serpula lacrymans, biodegradation, wood, Switzerland 1247.
 Solanum tuberosum, growth conditions, Fusarium 2030.

- Dryas drummondii, nodules ultrastructure, Frankia, actinorrhizas 8150.

Drying.

- effects on, Botrytis allii, neck rot, post-harvest decay, onions 8055.
 Escherichia coli injuries, antibiotics sensitivity, cell surface hydrophobicity 2241.
 soil moisture, effects on denitrification, forests 8938.
 starter cultures, viability, malolactic fermentation, wine, Leuconostoc oenos 7816.

Duck plague virus.

- detection, passive reverse hemagglutination methodology, ducks 9277.

Ducks.

- afatoxins dietary intake effects on, energy utilization, proteins utilization 3721.
 duck plague virus detection, passive reverse hemagglutination methodology 9277.
 diseases, toxicity Ferrosin 5354.

Dunes.

- coastal environments, sand, soil, sulfur oxidation, acidity, soil microorganisms 8968.

Duodenum.

- secretions, stimulation antibacterial activity, chloramphenicol, phanquinone, chiroquinolal, man 9088.

Dust.

- actinomycetes, isolation, enumeration, methodology comparison 1646.
 com, association, fungi 1904.
 grain, endotoxins levels, gram-negative bacteria 7109.
 gram-negative bacteria endotoxins levels, oilseed crops, Gossypium hirsutum 538.
 grain, aflatoxins determination, thin-layer chromatography 3704.

Dutch elm disease.

- biological control, antagonism, Streptomyces albobivaceus, Streptomyces griseus inoculation, Ustilago americana 2890.
 Ceratocystis ulmi, biological control, fungi 6330.
 Ceratocystis ulmi, disease resistance compounds, antifungal activity, Ulmus americana 366.
 Ceratocystis ulmi, disease resistance, mansoniensis isolation, antifungal activity, Ulmus americana 3926.
 Ceratocystis ulmi, disease resistance, plant breeding, Ulmus 2870.
 Ceratocystis ulmi, disease resistance, plant breeding, Ulmus 8186.
 Ceratocystis ulmi, geographical isolates, hypovirulence, pathogenicity, Ulmus 8192.
 disease control, forest management, Canada 2922.
 Ophiostoma ulmi, biological control, Pseudomonas 2081.
 Ulmus, disease control, Ceratocystis ulmi 5606.

Dwarf blight.

- Pseudomonas cichorii, Schefflera arboricola 1162.

Dyes.

- antibacterial activity, antifungal activity 9131.
 antimicrobial activity, gram-negative bacteria, gram-positive bacteria, dental plaque isolates, dentistry 7553.
 industrial effluents, wastewater treatment, activated sludge, carbon (activated) 6677.
 ligands chromatography, purification, characterization, phospho-2-keto-3-deoxy-gluconate aldolase, Zymomonas mobilis 4294.
 redox potential mediators, electron transfer, respiration rates, fuel cells, bacteria 5242.

Dying.

- effects on, bacteria, radioresistance 4718.

Dysentery.

- prophylaxis, treatment, pyrantel tartrate, +tylosin, +lincomycin, feeds, pigs 1918.

Ear rot.

- Aspergillus flavus, sclerotia formation, Zea mays 8784.
 disease resistance, screening projects, Zea mays 4580.
 Fusarium, Zea mays, mycotoxins detection 7083.
 Gibberella zeae, disease resistance, zearalenone, 4-deoxynivalenol, production, hybrids, plant breeding, Zea mays 1180.

Earias insulana.

- biological control, toxicity, δ -endotoxin, Bacillus thuringiensis 5247.

Ebola virus.

- indirect fluorescent antibody test, cell culture quantitation 1548.

Echinomycin.

- biosynthesis, N.M.R., bacteria 4066.
 biosynthesis, protoplasts, Streptomyces echinatus 8369.
 biosynthesis, Streptomyces echinatus, phosphate, amino acids effects on 520.
 derivatives biosynthesis, quinoxaline-carboxylic acid analogs effects on fermentation, Streptomyces echinatus 5799.
 derivatives, biosynthesis, structure, Streptomyces echinatus 8370.
 production, insulin conversion, protoplasts, Streptomyces echinatus 3133.
 +trostin A, peptide antibiotics complexes, Streptomyces iverni 4058.

ECHOvirus.

- water pollution, rivers, Japan 8423.

- water quality, rivers, sewage effluents 9254.

ECHOvirus 1.

- transport, survival, sewage 5828.

ECHOvirus 6.

- antiviral activity, aryl-furfurane derivatives 4764.

Echtes Ackerbohnen-mosaic virus.

- infection, inhibition, reproduction, yield, Vicia faba 7938.

Ecological distribution.

- Canada, Endogonaceae, Glomus, taxonomy 8166.
 cellulolytic microorganisms, relationship wood decay, coastal waters 8196.
 ectomycorrhizas, tundra, forests, transitions, alpine environments 2101.
 environmental factors, population levels, actinomycetes, soil, Australia 8991.
 Finland, Boletaceae, ectomycorrhizas, Pinus sylvestris, Betula pubescens 2100.
 Microsporium gypseum mating types, soil, Spain 8980.
 mycorrhizas, Basidiomycetes, Arctic, alpine environments, conferences 2546.
 Pezizales, soil, Greenland 2128.
 Phymatotrichum omnivorum, relationship soil cations 374.
 phytopathogenic fungi, host range, India, new records 1963.

- ecological evaluation,**
genetic engineering microorganisms, use, biodegradation, chemical pollution 3685.
microorganisms, laboratories, continuous culture, batch culture, methodology, reviews 4974.
- conazole,**
antifungal activity, relative inhibition factors measurements, dose-response effects 4017.
drug sensitivity testing, *Candida* 5735.
- conazole nitrates,**
effects on *Saccharomyces cerevisiae*, mitochondria, growth 1338.
- concomitant importance,**
Cajanus cajan diseases, crop production, Asia, Africa, North America, South America 7139.
- ecosystem analysis,**
fungi, soil moisture, seasonal variations, vertical distribution, tundra 2129.
methodology, intestinal microflora, rats 7587.
microorganisms, interspecies relationships, isolation, media (culture), measuring techniques, reviews, books 5092.
organic matter, microorganisms, biogeochemistry, nutrient dynamics, reviews, peatlands 7254.
- ecosystem dynamics,**
savannahs, tropical environment, soil microorganisms 2941.
- ecosystems management,**
weed control, biological control, epidemiology, pathogens 3694.
- ectomycorrhizas,**
Abies fraseri seedlings, metalaxyl effects on growth 1234.
asepsis, culture 5542.
+auxin, effects on roots formation, propagation, *Pinus pinaster* 5929.
basidiomycetes, fruit bodies, *Pinus sylvestris*, *Betula pubescens*, Finland 2102.
Basidiomycetes, Zygomycetes, leaves, *Tozzia alpina* 8204.
Betula pubescens, spreading, colonization, seedlings, *Betula pendula* 5558.
biological control, antagonism, *Pythium*, soil-borne diseases, *Fagus* 5513.
Boletaceae, ecological distribution, *Pinus sylvestris*, *Betula pubescens*, Finland 2100.
carbon-13 distribution, fatty acids, N.M.R. 8957.
colonization, environmental factors, roots 5551.
colonization roots, culture systems, seedlings, *Pinus* 7637.
colonization, stimulation roots growth, *Pinus resinosa* 5561.
culture, use inoculum, trees 5927.
ecological distribution, tundra, forests, transitions, alpine environments 2101.
forest practices effects on, clear cutting, burning, association, *Pseudotsuga menziesii* 7231.
formation, Coniferales seedlings, high-altitude environments, mines 5547.
formation, *Eucalyptus* 6323.
formation, rhizosphere temperature effects on, forests soil 5549.
fruit bodies, basidiomycetes, inoculum, colonization, seedlings, *Betula pendula* 5558.
Hebeloma cylindrosporum, *Pinus pinaster*, chitin levels 3949.
Homobasidiomycetes, spore germination, environmental factors, roots exudates effects on 2130.
immobilized cells, inoculum efficacy, trees 8163.
inhibition, seedlings planting, *Picea sitchensis* 5566.
inoculation, growth stimulation, seedlings, *Picea sitchensis* 5565.
inoculation methodology, trees, reviews 831.
inoculation, stimulation growth, nutrient uptake, seedlings, greenhouses, *Pinus* 5567.
inoculation, trees response association, environmental effects, reviews 350.
inoculation, trees response association, factors affecting, reviews 349.
inoculum potential, roots colonization, competition, soil, trees 5563.
interaction, plants roots pathogens, fungi, reviews 393.
isolation, pure culture, methodology, nutrient requirements, reviews 829.
Laccaria laccata, aromatic compounds, biological control, root rot, *Fusarium oxysporum*, *Pseudotsuga menziesii* 5562.
liquid culture, inoculum production 5937.
mycelia, inoculation, seedlings, *Pinus banksiana* 7227.
mycelia, inoculation, seedlings, *Pinus banksiana* 7228.
mycelia, spreading, colonization, nutrient transport, roots, *Pinus sylvestris* 5573.
- non-target organisms,** inhibition, mancozeb, paraquat, seedlings, *Pinus sylvestris* 5570.
- phosphatase,** lone phosphate, nutrient uptake, comparison Basidiomycetes saprophytes, *Betula pubescens*, *Pinus contorta* 5575.
- phosphate,** nutrient uptake, fertilizer applications stimulation, *Pseudotsuga menziesii* 5574.
- Psilothus tinctorius,** colonization, seedlings, mines, soil, *Pinus* 8931.
- Psilothus tinctorius,** inoculation, nutrient uptake, phosphorus, nitrate, seedlings, *Quercus robur* 8935.
- Psilothus tinctorius,** inoculation, stimulation, roots growth, seedlings, *Pinus taeda* 3908.
- Psilothus tinctorius,** *Pinus strobus*, in vitro 5543.
- Psilothus tinctorius,** *Suillus granulatus*, effects on translocation, carbon sources, nitrogen sources, photosynthesis, *Pinus taeda* 5572.
- plants,** deserts, *Algeria* 5521.
- Quercus,** nitrogen fertilizers effects on 3941.
- roots colonization,** inhibition, heavy metals, *Picea sitchensis* 8168.
- roots colonization,** mathematical models, forestry 5577.
- roots colonization,** population levels, fertilizer applications inhibition, *Picea sitchensis* 5552.
- roots colonization,** water temperature, immersion, seedlings, *Pinus radiata* 7219.
- Sclerotinia aurantium,** *Hebeloma*, inoculation, plantations, *Quercus robur*, *Quercus petraea* 7220.
- seedlings inoculation,** roots colonization, succession, spatial distribution, soil, *Betula* 5556.
- seedlings inoculation,** survival, transplantation, *Pinus caribaea* 5569.
- seedlings,** *Quercus imbricaria* 5564.
- sensitivity,** thiram, herbam, silviculture 7299.
- Shorea seedlings,** Malaysia 7230.
- Sphaerosporella brunnea,** *Pinus banksiana* 8162.
- succession,** spreading, spatial distribution, fruit bodies, *Betula pubescens* 5557.
- Suillus luteus,** fruit bodies formation, environmental factors, plantations, *Pinus radiata* 5671.
- symbionts,** *Pinus banksiana*, Canada 8165.
- symbiosis,** Asteraceae, Australia 2132.
- symbiosis,** plants roots, measuring techniques, reviews 832.
- temperature effects on,** *Salix rotundifolia*, tundra 2103.
- trees,** conferences 5945.
- Ectomycorrhizas, (continued)**
trees inoculum production, methodology, reviews 830.
trees, research programs, forestry 5550.
Tuber melanosporum, *Cistus incanus* subsp. *incanus*, roots, growth 3940.
- Ecuador,**
Dothistroma septospora needle blight, *Pinus radiata* pathology 5600.
- Edine D,**
analogs, decarboxylation, synthesis 1429.
- EDTA,**
+chlorhexidine digluconate, antibacterial activity, gram-negative bacteria, association gentiourinary tract infection, man 6456.
effects on activated sludge cadmium uptake 3192.
+lis+lysozyme, effects on drug sensitivity testing, antibacterial activity, *Pseudomonas aeruginosa*, animal isolates, horses 2253.
- EDTA-tromethamine,**
+antimicrobial agents, antibacterial activity, gram-positive bacteria 4616.
- Effluents,**
animal wastes, wastewater treatment, bacteria 7512.
control, bacteria, fungi, biodegradation, books, conferences 1697.
distilleries, *Pseudomonas aeruginosa*, *Vibrio cholerae*, chemotaxis, coastal waters 560.
oil and gas industry, effects on microorganisms, biodegradation, USA, Wyoming rivers 9038.
pulp mills, biodegradation, bacteria 1467.
viruses microbial pollution, land disposal, reviews 2335.
waste water, viruses recovery, activated sludge 4956.
- Efoisite-AI,**
antifungal activity, *Phytophthora* 8124.
antifungal activity, *Phytophthora cinnamomi*, plant diseases, roots, *Persea americana* 8923.
disease control, *Pythium* aphandimerum, blight, *Agrostis* 8134.
disease control, *Pythium ultimum*, decline, *Vitis vinifera* 8122.
foliar applications, disease control, downy mildew, *Peronosclerospora sorghi*, *Sorghum bicolor*, *Zea mays* 8126.
injection, disease control, *Phytophthora cinnamomi*, root rot, *Persea americana* 8125.
seed treatments, disease control, downy mildew, *Peronosclerospora sorghi*, *Sorghum bicolor*, *Zea mays* 8144.
- Efrotomycin,**
antibacterial activity, *Clostridium perfringens*, food additives, chickens 1065.
- Eggs,**
albumen, bactericidal activity, gram-positive bacteria, gram-negative bacteria, temperature, pH effects on, chickens 4010.
cooking, inactivation, *Salmonella typhimurium*, *Staphylococcus aureus* 1050.
food contamination, aflatoxin B1, aflatoxin M1, aflatoxin G1, aflatoxin D1, aflatoxin G2, aflatoxin G3, aflatoxin M2, aflatoxin M1, feeds contamination, chickens 8727.
spoilage, bacteria, detection, automated methods, comparison organoleptic evaluation 1052.
storage, growth, coliforms, *Salmonella*, *Staphylococcus aureus* 6969.
transmission, mycotoxins, reviews 7075.
- Egypt,**
food, detection, aflatoxin B1, aflatoxin G1, screening methodology 7064.
grain, detection *Fusarium* toxins 7069.
man food, animals feeds, isolation, *Aspergillus*, aflatoxins biosynthesis in vitro 7062.
Musa sapientum, *Drechslera australiensis* leafspot, symptoms, new records 8002.
oil and gas industry, wastewater treatment, hydrocarbons, industrial effluents, biodegradation, *Pseudomonas aeruginosa* 2190.
rhizoplane microorganisms, *Fusarium*, seasonal variations 6335.
Roquefort cheese, mycotoxins levels 7058.
Vicia faba flowers, mycoflora, beans aflatoxins contamination 7085.
- host-pathogen interactions,** host-parasite interactions, predator-prey interactions, *Spodoptera littoralis*, *Bacillus thuringiensis*, *Zelex chlorophthalma*, *Paederus alfieri* 128.
nitrogen-fixing bacteria, isolates, soil, water 4647.
Zea mays, *Helminthosporium turcicum* blight 2792.
- Eichhornia crassipes,**
aromatic compounds, storage cells, disease resistance, antifungal activity, *Cercospora rodmannii*, *Acremonium zonatum* 8813.
biological control, leaves penetration, host-pathogen interactions, *Acremonium zonatum* 8827.
leafspot 8818.
wastewater treatment, digestion (anaerobic), role 4106.
- Eikenella corrodens,**
antibiotic sensitivity testing, β -lactam antibiotics, fosfomycin 4793.
- Eire,**
rivers, heterotrophic microorganisms slimes, heavy metals concentration, *Eire* 6716.
- Eisenia bicyclis,**
 β -D-glucan, biodegradation, *Rhizopus* exo-1,3- β -D-glucanase 3670.
- Elaeagnus,**
nodulation, actinomycetes, Frankia 8149.
- Elaeagnus angustifolia,**
leafspot, *Septoria elaeagni*, epidemiology, etiology 7989.
- Elaeagnus umbellata,**
actinomycetes, Frankia, nodulation, biotyping 8158.
- Elaeis guineensis,**
plant breeding, disease resistance, wilt, *Fusarium oxysporum* f.sp. *elaedis* 2871.
- Elaphomyces,**
ethylene production, ascomycetes, forests, Sweden 351.
- Elastin,**
hydrolysis, *Bacillus subtilis* proteinase 921.
- Electrical conductance,**
meters, use, measuring techniques, bacteria growth 3311.
- Electrical impedance,**
automated methods, enumeration, psychrotrophic bacteria, milk 5315.
enumeration, coliforms 6761.
Eucalyptus obliqua, *Eucalyptus globulus* subsp. *bicostata*, dieback, *Armillaria luteobubalina* 2117.
measuring techniques, detection, bacteria, blood culture 2484.
measuring techniques, growth, *Escherichia coli* 681.
- Electrical properties,**
phylioplane, measurement, phytopathogenic fungi spores discharges 7914.

Electrical properties, (continued)

- phytoplankton, phytopathogenic fungi spores discharges, *Phaseolus vulgaris*, *Zea mays* 7143.
 phytoplankton, phytopathogenic fungi spores discharges, *Phaseolus vulgaris*, *Zea mays* 7925.
Electrical stimulation,
 +sodium chloride, +sodium nitrite, effects on bacteria microflora, beef 6976.
Electricity,
 production, animal wastes conversion, digestion (anaerobic) 5275.
 pseudorabies virus photoinactivation 468.
Electrochemistry,
 bioreactors, biotechnology, electron transfer 3401.
 detection penicillin V precursors fermentation 1396.
 dissolved oxygen levels, diagnosis, bacteria, antibiotic sensitivity testing, aerobic bacteria 8345.
Electrodes,
 creatine, creatinine, immobilized enzymes, creatinase, creatinase, sarcosine oxidase, *Pseudomonas*, *Corynebacterium* 89.
 dissolved oxygen, fermenters 5877.
 gases sensors, measuring techniques, *Saccharomyces cerevisiae* ethanol production 1683.
 immobilized cells, asparaginase detection, *Serratia marcescens* 6777.
 immobilized cells, waste water, chemical analysis 768.
 immobilized enzymes, *Pseudomonas*, electrodes, creatinine 89.
 methane, ammonia, nitrogen dioxide, immobilized cells, *Nitrosomonas*, *Nitrobacter*, *Methylobacterium flagellata* 767.
 measuring, glucose feeding, *Escherichia coli* batch culture 676.
 nitrifying bacteria immobilized cells, +immobilized enzymes creatinine deiminase, creatinine determination 1605.
 sensors, biotechnology 6732.
Trichoderma viride lysine 2-monooxygenase immobilized enzymes, use, assays, L-lysine, fermenters 38.
Electrodialysis,
 proteins purification 3428.
Electron microscopy,
 Acheleplasma laidlawii freezing association, methanol, acetone, use, extraction, lipids 3314.
 comparison, enzyme-linked immunosorbent assay, immunoelectron microscopy, use, detection, rotavirus (human), feces 3236.
 comparison, Rotavirus, detection, rotavirus (human), feces 3239.
 detection, Mycoplasma, contamination, cell culture, methodology 3349.
 detection, rotavirus, coronavirus, feces, cattle, comparison, enzyme-linked immunosorbent assay 8434.
 detection, rotavirus (human), feces, man 641.
 detection, viruses, antigen-antibody complexes 653.
 dihydrolipamide dehydrogenase +oxoglutarate dehydrogenase (lipamide) +dihydrolipamide succinyltransferase multienzyme complexes, thioctic acid localization, *Escherichia coli* 7702.
 Glomus, mixed infection, tobacco mosaic virus, *Lycopersicon esculentum* 4535.
 glutic acid bacteria ultrastructure, multiplication, grain contamination 2742.
 pathology, *Coprinus psychromorbidus* infection, *Triticum aestivum* 7933.
 ribosomal subunit 50S, crystals, *Bacillus stearothermophilus* 874.
 rotavirus detection, comparison, counter immunoelectrophoresis, enzyme immunoassay 4980.
 rotavirus (human) detection, feces 1552.
 staining, Congo virus surfaces structure, models 5004.
 +ultrafiltration, rotavirus detection, methodology comparison 1558.
 ultrastructure, rhizoplane interface, soil microorganisms, books 1693.
Xanthomonas campestris pv. *oryzae*, growth, penetration, *Oryza sativa*, leaves 6243.
Electron transfer,
 bioreactors, electrochemistry, biotechnology 3401.
 fuel cells, respiration rates, dyes, redox potential mediators, bacteria 5242.
 redox potential mediators, fuel cells, bacteria 5243.
Electron transport,
 coupling, bacteria, fuels cells, redox potential mediators 6099.
 coupling, bacteria, fuels cells, redox potential mediators 6101.
 cytochrome c oxidase, sodium acid effects on, fermentation optimization, ethanol production, *Saccharomyces cerevisiae* 3624.
Electron transport chain,
 cytochrome c551, cytochrome c552.5, purification, characterization, multienzyme complexes, cell membranes, *Thiobacillus versutus* 7703.
 nodules, nitrogen fixation, *Rhizobium*, *Pisum sativum* 2972.
Electronic equipment,
 preservatives 1291.
 use trypsin like enzymes, light sensitization, streptomyces giseus 66.
Electrophoresis,
 adenosylhomocysteinase, purification, characterization, *Alcaligenes faecalis* 7716.
 alcohol dehydrogenase, ethanol contamination, yeasts 7687.
 detection, potato spindle tuber viroid, *Solanum tuberosum* 8861.
Escherichia coli, lipopolysaccharides characterization 6058.
 esterase, *Yersinia enterocolitica*, *Yersinia pseudotuberculosis* subsp. *pseudotuberculosis* 6856.
 R factors, antibiotic resistance, epidemiology, clinical isolates, *Salmonella typhi* 4001.
 gels, use, yeasts mitochondria tRNA characterization, methodology 3362.
 herpesvirus DNA detection, mammalian cells 4977.
 immunoprecipitation, antibodies, specificity, respiratory syncytial virus, methodology 7566.
 methodology, detection, viroids, viruses, plants 4152.
 methodology, identification, association, antigenic characteristics, *Rhizobium meliloti* 4184.
 methodology, iron reduction enzymatic activity, *Rhodospseudomonas sphaeroides* 3347.
 monoclonal antibodies, diagnosis, plant diseases, microorganisms, methodology 7921.
 penicillin-binding protein, *Escherichia coli* 3441.
Persea americana, detection, plant diseases, avocado sunblotch disease viroid 4525.
 phenylalanyl-tRNA synthetase, purification, characterization, *Escherichia coli* 5995.
 proteins, cytoplasm, *Streptococcus* 6806.
 purification, characterization, α -D-glucosidase, *Bacillus stearothermophilus* 6833.
 purification, characterization, acyl-CoA dehydrogenase (NADP⁺), *Escherichia coli* 7697.

Electrophoresis, (continued)

- purification, characterization, carboxylase, *Pseudomonas fluorescens* 6869.
 purification, characterization, dextranucrase multiple forms, *Streptococcus sanguis* 6045.
 purification, characterization, endonuclease, *Saccharomyces cerevisiae* 7756.
 purification, characterization, thymidine, 2-oxoglutarate dioxygenase, *Neurospora crassa* 5122.
 use, detection, viruses infection, *Iris* 8816.
Electrophoretic mobility,
 T-2 toxin, fungi 5376.
Elements,
 nutrient requirements, *Aspergillus*, aflatoxins biosynthesis 7068.
Eleusine coracana,
 fungi vesicular-arbuscular mycorrhizas inoculation, greenhouses screening 2145.
 seeds, isolation, *Drechslera pluriseptata*, taxonomy, morphology 8048.
Elongation,
 inhibition, nocardin A interaction, *Bacillus megaterium* penicillin-binding protein 1397.
Elongation factor Ts,
 purification, affinity chromatography, *Escherichia coli* 8522.
Elisae batatas,
 scab, *Ipomoea batatas*, tubers yield 8007.
Elisae brasiliensis,
 infection, disease resistance, plant breeding, cultivars, *Manihot esculenta* 5497.
Elymoclavine,
 conversion, paspalic acid, physicochemical properties, *Claviceps* 5252.
Elymus juncea,
 incidence, plant diseases, *Sectoria spraguei*, *Pyrenophora trichostoma*, *Cochliobolus sativus* 1134.
Embryo fibroblasts,
 chickens, live combined vaccines production, Marek's disease virus, infectious hepatitis virus, herpesvirus (turkey) 7486.
Embryos,
Pinus taeda, disease resistance, necrosis ultrastructure, fusiform rust, *Cratogeomys quercum* f.sp. *fusiforme* 362.
 quail, cell culture, Sephadex carriers, propagation, mumps virus 7562.
Empyema,
Pseudomonas aeruginosa clinical isolates, β -lactam antibiotics antibacterial activity 497.
Emulsification,
 n-hexadecane, *Candida lipolytica* 9039.
 reversal, induction, *Nocardia amarae*, *Corynebacterium petrophilum*, water-in-oil emulsions 1878.
Emulsions,
 biosynthesis, *Acinetobacter calcoaceticus* 3552.
 effects on vesicular stomatitis virus infection, mammalian cells, cell culture 2434.
 lipids, waste treatment, activated sludge 3195.
 oils, parvovirus (porcine) vaccines production, pigs 7487.
 pasteurization, antimicrobial activity, mathematical models, bacteria, biodegradation 1297.
 water-in-oil, emulsification reversal induction, *Nocardia amarae*, *Corynebacterium petrophilum* 1878.
Enantioimers,
 lactic acid, production, use 2-haloacid dehalogenase 8517.
Encephalitis,
 cerebrosplinal fluid, herpes simplex virus 1, antigens, detection, enzyme-linked immunosorbent assay, man 652.
Encephalomyocarditis virus,
 interferon, antiviral activity, cell culture, mice 2226.
 infection, cell culture, prostaglandin E1 inhibition 7385.
Endo- β -D-glucanase,
 hydrolysis, carboxymethylcellulose, xylan, *Chaetomium cellulolyticum* 1752.
Endo- β -N-acetylglucosaminidase,
 isolation, *Staphylococcus*, characterization 4324.
Endo- β -galacturonase,
 immobilized enzymes, kinetics, *Aspergillus* 15.
Endo-1,3(4)- β -D-glucanase,
 hydrolysis, carboxymethylcellulose, xylan, *Chaetomium cellulolyticum* 1752.
Endo-1,3- α -D-glucanase,
 prophylaxis, dental caries, animal models 4140.
Endo-1,3- β -D-glucanase,
 biosynthesis, *Trichoderma viride* 920.
 production, carbon sources, lignocelluloses, agricultural wastes, *Streptomyces* 3470.
 production, mutants selection, *Trichoderma reesei* 1750.
 production, optimization, *Fusarium* 1811.
Streptomyces cellulose, isolation, characterization 2572.
Endo-1,3- β -D-xylanase,
 activity, cellulase samples, *Aspergillus niger*, *Trichoderma viride* 8533.
Aspergillus fumigatus production 1807.
 hydrolysis, carboxymethylcellulose, xylan, *Chaetomium cellulolyticum* 1752.
 immobilized enzymes, kinetics, polymers solubility, *Penicillium funiculosum* 5134.
 production, mutants selection, *Trichoderma reesei* 1750.
 production, *Pleurotusajor-caju* 90.
 production, thermal stability, *Thielavia terrestris* 5181.
Pseudocercospora heliotrichoides, biosynthesis, activity, isolation, characterization 7761.
 role *Sclerotinia sclerotiorum*, pathogenesis, virulence, *Helianthus annuus* 2010.
Streptomyces flavogriseus, production, hemi-celluloses, sodium hydroxide hydrolysis, bagasse, *Lolium* 5186.
Trichoderma reesei, production, activity 3496.
 xylan hydrolysis, *Cellulomonas* 2566.
Endo-1,4- β -D-glucanase,
 activity, *Bacteroides succinogenes* 3517.
Penicillium janthinellum, purification, characterization 7750.
Endo-1,4- β -D-mannanase,
 production, characterization, *Aeromonas hydrophila* subsp. *anaerogenes* 5135.
 purification, characterization, *Aspergillus tamarii* 5984.
Endo-1,4- β -D-xylanase,
 biosynthesis, characterization, *Neurospora crassa* 6013.
 cellobiose, xylosyl acceptors, *Cryptococcus albidus* 3671.
 purification, characterization, *Irpex lacteus* 7751.
Endo-1,5- α -L-arabinase,
 purification, characterization, potatoes tissue disintegration, *Bacillus subtilis*

- ndo-1,5- α -L-arabinase**, (continued)
1761.
- ndo-1,6- β -D-glucanase**,
biosynthesis, *Trichoderma viride* 920.
- ndocarditis**,
man, antibiotics prophylaxis, dental plaque antibiotic sensitivity testing 2252.
- ndocytococcus aureus**, bacteremia, measuring techniques, antibodies, leukochoic acid, comparison, α -hemolysin, diagnosis, man 7620.
- Streptococcus faecalis**, animal models, antibacterial activity, gentamicin, \pm mezlocillin, \pm ampicillin 4838.
- treatment, nafcillin, \pm tobramycin, \pm gentamicin, *Staphylococcus aureus*, serum bactericidal activity assays, rabbits 476.
- ndocranial harknessii**,
rust, pathogenesis, *Pinus banksiana* 8946.
- rust, susceptibility, geographical variations, seedlings, *Pinus ponderosa* 8945.
- ndoxyribonuclease**,
purification, characterization, nucleotide sequence cleavage, *Acetobacter acetii* subsp. *xylinum* 3501.
- Streptococcus sanguis**, purification, characterization 4328.
- ndoxyribonuclease (apurinic)**,
Desulfotomaculum nigrificans, purification, characterization 6868.
- ndoxyribonuclease BamH1**,
Bacillus amyloliquefaciens, production, media (culture) 8549.
- ndoxyribonuclease BvII**,
isolation, substrate specificity, *Bacillus brevis* 1741.
- ndextranase**,
Lipomyces starkeyi, purification, characterization 2586.
- ndogonaceae**,
taxonomy, ecological distribution, geographical distribution, Canada 8166.
- ndomietitis**,
treatment, bacteria, clinical isolates, antibiotic sensitivity testing, cattle 4813.
- ndomycopels**,
amylolytic enzymes production 8546.
- ndomycopsis fibuligera**,
exo-1,4- α -D-glucosidase, α -amylase, production, optimization, carbohydrates hydrolysis 5193.
- ndomycorrhizas**,
acid phosphatase activity, *Epidendrum ibagense* 8199.
- effects on host plants growth, association clays media 2136.
- Glomus fasciculatum*, \pm Rhizobium, \pm phosphate, inoculation, *Vigna unguiculata*, *Cajanus cajan* 2945.
- Glomus mosseae*, growth models, symbiosis, roots, *Allium porrum* 3934.
- Glomus mosseae*, \pm Rhizobium, inoculation, growth stimulation, *Acacia holosericea*, *Acacia radiana* 6355.
- interaction, nitrogen, phosphorus, growth, *Lolium perenne* 8971.
- interaction, soil-borne diseases fungi, Nematoda plants pathogens, reviews 392.
- Leguminosae*, crops, India 7251.
- plants, deserts, Algeria 5621.
- Rhizoctonia depends, *Ophrys lutea*, laccase localization 380.
- roots colonization, competition, inoculation, plants 5568.
- seedlings, *Quercus imbricaria* 5564.
- spores culture, isolation, methodology 3358.
- symbiosis, *Pseudotsuga menziesii*, role, drought tolerance, USA 2913.
- ndonuclease**,
purification, characterization, electrophoresis, *Saccharomyces cerevisiae* 7756.
- ndonuclease S1**,
Penicillium kili, immobilized enzymes, β -(sulfatoethylsulfonfyl) aniline cross-linkage 81.
- ndopelidase I**,
activity, temperature, sodium dodecyl sulfate effects on, *Bacillus sphaericus* 5129.
- ndoracium acaciae**,
rust, *Acacia*, Hawaii 7236.
- ndoracium hawaiiense**,
rust, *Acacia*, Hawaii 7236.
- ndosperm**,
characterization, *Zea mays* hybrids, association aflatoxins contamination, environmental effects 6724.
- Zea mays*, mutants, effects on, seedlings, *Fusarium moniliforme*, infection 3804.
- ndopores**,
formation, *Bacillus*, nutrient requirements, carbon sources, soil 4619.
- ndothia havanensis**,
Eucalyptus marginata canker, pathology 370.
- ndothia peraltica**,
blight, vectors, *Lehmanna marginata*, *Castanea* 8954.
- canker, pathogenesis, *Castanea dentata*, *Castanea mollissima* 3914.
- hypovirulence, strain incompatibility, genetic analysis, biological control, chestnut blight 368.
- hypovirulence, temperature effects on growth rate, use biological control, blight, *Castanea dentata* 8184.
- infection, *Castanea dentata*, incidence 4526.
- killer factor, double-stranded RNA, virulence, biological control, blight, *Castanea dentata* 8636.
- milk-clotting enzymes, gel electrophoresis 6876.
- milk-clotting enzymes, purification, affinity chromatography 62.
- proteinase, amylase activity 8599.
- renin, proteolysis, cheese 2741.
- virulence conversion, *Castanea dentata* isolates, blight biological control 6326.
- virulence conversion, *Castanea dentata* isolates, blight biological control 6327.
- virulence conversion, double stranded RNA elimination, *Castanea sativa* blight biological control 6328.
- virulence, gene mapping, use biological control, blight, *Castanea dentata* 8183.
- ndothia aggregata sp.nov.**,
bark infection, *Pinus cantorta* 8185.
- Endotoxin**,
Bacillus sphaericus, spore crystals, toxicity, larvae, *Culex pipiens*, *Anopheles stephensi* 3572.
- Endotoxin**,
Bacillus thuringiensis subsp. *israelensis*, cytopathology, cell culture, *Aedes aegypti* 4491.
- Bacillus thuringiensis* subsp. *kurstaki*, cytotoxicity, binding, glycoproteins receptors, plasma membranes, *Choristoneura fumiferana* 5387.
- Bacillus thuringiensis*, toxicity, biological control, *Pectinophora gossypiella*. *Earias insulana*, *Agrotis ipsilon* 5247.
- Endotoxin**,
production, media (culture), *Bacillus thuringiensis* var. *kurstaki* 7786.
- Endotoxins**,
anorexia induction, *Choristoneura fumiferana*, biological control, *Bacillus thuringiensis* 3570.
- Bacillus thuringiensis*, biological control, *Anopheles sundaeus* 134.
- Bacillus thuringiensis*, *Choristoneura fumiferana*, cell lines, selection, resistance 6895.
- Bacillus thuringiensis*, serotypes, toxicity, *Aedes aegypti*, biological control 8635.
- Bacillus thuringiensis* subsp. *entomocidus*, biological control, *Spodoptera littoralis* 3563.
- Bacillus thuringiensis* subsp. *entomocidus*, biological control, *Spodoptera littoralis*, *Spodoptera exigua* 3566.
- Bacillus thuringiensis* subsp. *kurstaki*, biological control, *Spodoptera littoralis*, *Spodoptera exigua* 3566.
- Bacillus thuringiensis*, use, biological control, larvae, *Spodoptera littoralis*, *Boarmia selenaria* 118.
- bacteria, *Limulus* lysate test 1958.
- bacteria, *Limulus* lysate test, reviews 4490.
- Campylobacter fetus subsp. *jejuni*, lipopolysaccharides, carbohydrate composition, toxicity testing, mice 1945.
- contamination, raw materials use production contamination 8342.
- Cytophaga, humidifiers, textile industry, allergic alveolitis, man 1944.
- glycolipids, chemical composition, ultrastructure, *Salmonella minnesota* 4477.
- gram-negative bacteria, antibodies, enzyme-linked immunosorbent assay detection, blood 1939.
- gram-negative bacteria, humidifiers, allergic alveolitis, man 1943.
- gram-negative bacteria, levels, dust, oilseed crops, *Gossypium hirsutum* 5384.
- levels, grain dust, gram-negative bacteria 7109.
- lipid A proteins complex, characterization, purification, *Yersinia pseudotuberculosis* subsp. *pseudotuberculosis* 3763.
- plasma levels, *Limulus* lysate test methodology 1941.
- polysaccharides structure, *Bordetella pertussis* 7124.
- production, *Klebsiella pneumoniae*, *Enterobacter cloacae*, lipids emulsions 1946.
- Salmonella minnesota*, ultrastructure 3759.
- Salmonella minnesota*, ultrastructure, hydrophobicity, acids, bases treatment effects on 4476.
- spirochaetes, *Limulus* lysate test, Lyme disease 5385.
- Energetics**,
microorganisms growth, models, reviews 2427.
- photosynthesis, batch culture, continuous culture, phototrophic bacteria 9304.
- Energy**,
production, biomass, biotechnology, conferences, books 4248.
- production, biomass use, conferences, books 1700.
- role, *Pyricularia oryzae* pathogenicity, *Oryza sativa* varieties 1132.
- Energy balance**,
mass, anaerobic bacteria methanogenesis 4679.
- nitrogen fixation, *Rhizobium leguminosarum* var. *phaseoli*, cultivars strains interaction, *Phaseolus vulgaris* 8238.
- Rhizobium, nitrogen fixation, nodules respiration, *Glycine max* 8251.
- Energy charge**,
Streptomyces griseus, A-factor intracellular levels effects on 4846.
- Energy metabolism**,
active transport, plasma membranes, sodium dodecyl sulfate inhibition, *Enterobacter cloacae* 7549.
- nodules, nitrogen fixation, Rhizobium, *Pisum sativum* 2972.
- relationship phosphate, inhibition, arsenic acid resistance, streptothricin biosynthesis, *Streptomyces noursei* 7470.
- Energy requirements**,
bacteria, association, monomers biosynthesis, excretion, mathematical models 8512.
- ethanol fermentation, reduction 174.
- Energy resources**,
fermentation products, industrial wastes, processing, citrus 6102.
- hemicelluloses, fermentation, *Bacteroides* 6156.
- methanogenesis, biotechnology, USA 6395.
- organic acids production, biomass, digestion (anaerobic), *Trichoderma reesei* 3417.
- Salix caprea* cellulose, cellulase hydrolysis 8676.
- wood biodegradation, batch culture, digestion (anaerobic), microorganisms 3655.
- Energy utilization**,
ducks, aflatoxins dietary intake effects on 3721.
- thermodynamics, microorganisms 853.
- Enilconazole**,
disease control, post-harvest decay, oranges, stem rot, green mold 5470.
- Enkephalin**,
radioimmunoassay, *Staphylococcus aureus* protein A 1606.
- Enolic acid**,
Clostridium sporogenes, reduction, ATP biosynthesis 1842.
- Enolase**,
cadmium(II) activation, kinetics, dissociation, yeasts 3485.
- Enoxacin**,
antibacterial activity 449.
- antibacterial activity, *Enterobacteriaceae* 6448.
- antibacterial activity, *Pseudomonas aeruginosa* 9090.
- cross-resistance, *Pseudomonas aeruginosa*, *Escherichia coli* 6421.
- synthesis, structure-activity relationships 7364.
- Enteritis**,
Campylobacter fetus subsp. *jejuni*, antibodies detection, enzyme immunoassay methodology, man 782.
- Campylobacter fetus subsp. *jejuni*, diagnosis, smears methodology 3297.
- Enterobacter**,
antibacterial activity, apalcillin 4840.
- antibacterial activity, fludalanine \pm pentazonide 6454.
- antibiotic resistance, cross-resistance, cephalosporins, penicillins 7352.
- β -lactam antibiotics antibiotic resistance, β -lactamase role 438.
- β -lactamase, antibiotic resistance, antibacterial activity, cefotiam 4711.
- monosodium methanearsonate, metabolism, conversion 1284.
- netilmicin sensitivity 6401.
- uptake levels, wetwood, *Populus euramericana* 8953.
- Enterobacter aerogenes**,
immobilized cells, solvents production, reviews 3575.
- nitrogen fixation, bark, *Bruguiera gymnorhiza* 2098.
- oxygen consumption, batch culture, continuous culture 6776.
- wey fermentation, 2,3-butylene glycol production 2643.

Enterobacter agglomerans,

endotoxins lesions, grain dust, gram-negative bacteria 7109.
feeds contamination, chickens 7009.

Enterobacter cloacae,

β -aminopenicillanic acid, new records, β -lactamase inhibition 2263.
antibacterial activity, WIN 49375 9091.
antibiotic resistance, β -lactamase, hydrolysis, antibacterial activity,
(D,L)-7-(α -fluoroacetyl)aminocephalosporanic acids 9190.
antibiotic sensitivity testing, ampicillin, amoxycillin 2198.
association, *Hyalella azteca*, methodology, characterization, drinking water,
disinfection 6712.
chloramines disinfection, pH effects on 9246.
feeds contamination, chickens 7009.
growth, endotoxins production, lipids emulsions 1948.
inhibition, active transport, plasma membranes, sodium dodecyl sulfate inhibition
7549.
 β -lactamase, biosynthesis, inducers, correlation, penicillins, antibacterial
activity 2261.
 β -lactamase, inhibition, temocillin, cefoxitin, structure-activity
relationships 5120.
 β -lactamase, X-ray crystallography 1760.
nitrogen fixation, bark, *Bruguiera gymnorhiza* 2098.
nitrogen-fixing bacteria, *Saccharum* 5652.
norfloxacin drug sensitivity testing 9095.
serotyping, use, blood group O antigens 3296.

Enterobacteriaceae,

2-acetylpyrimidine, 2-acetylquinoline, 1-acetylisoquinoline,
3-acetylisoquinoline, thiosemicarbazones, antibacterial activity 7372.
ampicillin resistance, β -lactamase activity 4704.
antibacterial activity, aztreonam \pm β -lactam antibiotics, \pm amikacin
3156.
antibacterial activity, cefotaxime, moxalactam, temocillin 5754.
antibacterial activity, ceftriaxone 4827.
antibacterial activity, cephalosporins 3099.
antibacterial activity, ciprofloxacin 4745.
antibacterial activity, ciprofloxacin 4746.
antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid
6645.
antibacterial activity, enoxacin 6448.
antibacterial activity, moxalactam, cefazidime 9186.
antibacterial activity, norfloxacin 9100.
antibacterial activity, temocillin 3105.
antibacterial activity, temocillin, antibiotic synergism, β -lactam
antibiotics 3122.
antibacterial activity, ticarcillin+clavulanic acid 9191.
antibacterial activity, ticarcillin, clavulanic acid, piperacillin, cefotaxime
4809.
antibiotic FCE 22101 antibacterial activity 1431.
antibiotic resistance, β -lactamase, plasmids 8290.
antibiotic resistance, antibacterial activity, tyrothricin, gramicidin 7477.
antibiotic resistance, rivers, ponds, Bangladesh 4133.
antibiotic sensitivity testing, antibiotic HR810 6511.
antibiotic sensitivity testing, antibiotic SK&F 88070 6510.
antibiotic sensitivity testing, measuring techniques, automated methods
comparison 3061.
antibiotic sensitivity testing, R factors, clinical isolates, nosocomial
infection 4693.
antibiotic synergism, β -lactam antibiotics+amikacin, antibacterial activity
9165.
blood culture, identification, methodology 5053.
cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1388.
cefamandole, antibacterial activity 4621.
ceftriaxone antibacterial activity, agar diffusion test 1392.
ciprofloxacin, antibacterial activity 4734.
clinical isolates, antibacterial activity, aminoglycoside antibiotics 7444.
clinical isolates, antibacterial activity, bactericidal activity, dibekacin,
gentamicin, tobramycin 6540.
clinical isolates, antibacterial activity, clavulanic acid+ticarcillin 4835.
clinical isolates, antibiotic resistance, aminoglycoside antibiotics, Turkey, USA
2195.
clinical isolates, antibiotic sensitivity testing, quinolones, derivatives 4726.
clinical isolates, cephalosporins, enhancement, bactericidal activity, amikacin,
gentamicin 6513.
clinical isolates, moxalactam, antibacterial activity 5768.
clinical isolates, moxalactam, antibacterial activity 5768.
detergents resistance 7339.
drug sensitivity testing, cotrimoxazole, methodology 7371.
R factors, antibiotic resistance 4002.
feeds contamination, chickens 7009.
food contamination, seafood, Places 8712.
growth, blood culture, correlation, hypertonicity, antibiotics 783.
hydrogen production, isolates, bioreactors 6923.
identification, automated methods 2251.
identification, AutoMicrob test, biochemical characteristics 705.
identification, AutoMicrob test, computer applications 1645.
identification, AutoMicrob test, Entenic Test system 713.
identification, drug sensitivity testing, methodology, urine specimens, man 1585.
identification, Entenic Test system 686.
identification methodology 732.
identification methodology 4197.
identification methodology 5027.
identification methodology, Autocast test use 788.
identification methodology, comparison, blood culture 670.
identification, use, pyrolysis, chromatography 9324.
Inc plasmids, antibiotics, effects on, antibiotic resistance 6423.
isolation, waste water, gentamicin antibiotic resistance, plasmids transmission
9076.
 β -lactam antibiotics resistance, relationship, β -lactamase production
9078.
 β -lactamase, biosynthesis, inducers, correlation, penicillins, antibacterial
activity 2261.
 β -lactamase, role antibacterial activity, moxalactam 5769.
netilmicin sensitivity 6401.
norfloxacin, comparison, nalidixic acid, cinoxacin, oxolinic acid, antibacterial
activity 7373.
norfloxacin drug sensitivity testing 9095.
outer membranes membrane proteins ompA gene detection, hybridization analysis

Enterobacteriaceae, (continued)

1616.
quality control, reagents, use, identification 1370.
recovery, bottles methodology comparison, clinical isolates 5038.
spillage, detection, Limulus lysate test, catalase production, luncheon meat
6967.
spillage, smoke preservation, seafood, Scombridae 8718.

Enterobactin,

scandium(III) iron(III) complex, antibacterial activity, gram-negative bacteria
5727.

Enterotoxin A,

formation, *Staphylococcus aureus*, canned food, bacon 6979.
multiple forms, purification, characterization, *Staphylococcus* 2769.
production, purification, *Staphylococcus* 1948.
production, thermal injury, *Staphylococcus aureus* 7913.
Staphylococcus aureus, radioimmunoassay, food 1942.
Staphylococcus aureus, slides assays 4489.

Enterotoxin B,

chromatofocusing, *Staphylococcus aureus*, characterization 1086.
production, purification, *Staphylococcus* 1948.
Staphylococcus aureus, slides assays 4489.
Staphylococcus, detection, skin tests, guinea-pigs, methodology 233.

Enterotoxin C,

Staphylococcus aureus, slides assays 4489.

Enterotoxin C1,

chromatofocusing, *Staphylococcus aureus*, characterization 1086.

Enterotoxin C3,

Staphylococcus aureus, isolation, characterization 8751.

Enterotoxins,

ADP-ribosyl transferase, nucleotide sequence, amino acid sequence, comparison,
biosynthesis, *Escherichia coli*, *Vibrio cholerae* 7120.
biosynthesis, *Aeromonas* biotypes 2767.
biosynthesis, *Staphylococcus aureus*, clinical isolates 2199.
biosynthesis, *Staphylococcus aureus*, milk isolation bacteria antagonist 8707.
biosynthesis, taxonomic significance, *Aeromonas* 3760.
Campylobacter jejuni, purification 8749.
Clostridium perfringens, antisera preparation methodology 1959.
Clostridium sporiforme, purification, characterization, toxicity testing 4481.
detection methodology, *Escherichia coli* serotyping, Vero cells 3345.
detection, nitrocellulose enzyme-linked immunosorbent assay, *Escherichia coli*,
Vibrio cholerae 4179.
Escherichia coli, adsorption filter paper, hemolysis assays 4485.
Escherichia coli, assays methodology 3354.
Escherichia coli, biosynthesis, properties, antibiotics effects on 228.
Escherichia coli, detection, Biken test, traveller's diarrhea clinical isolates
1938.
Escherichia coli, detection, enzyme-linked immunosorbent assay 1937.
Escherichia coli, detection, enzyme-linked immunosorbent assay 7123.
Escherichia coli, detection, enzyme-linked immunosorbent assay, methodology 8749.
Escherichia coli, detection, ganglioside GM1+enzyme-linked immunosorbent assay
1960.
Escherichia coli, detection methodology 5380.
Escherichia coli, genes probes 5389.
Escherichia coli, homogeneity, amino acid composition 6212.
Escherichia coli, isolation, characterization, cattle isolates 8762.
Escherichia coli, levels, sonication 1957.
Escherichia coli, production, detection, feces, supernatants 1961.
food contamination, enzyme-linked immunosorbent assay, *Staphylococcus* 8737.
food probes, *Escherichia coli* detection, water, DNA hybridization analysis
1087.
production association, *Escherichia coli* identification, hybridization analysis
1934.
production, clinical isolates, Campylobacter jejuni 7113.
production, *Escherichia coli* plasmids, gene expression, colonization factors
7578.
production, *Escherichia coli*, *Vibrio cholerae*, detection, radioimmunoassay 3272.
production, factors affecting, *Staphylococcus aureus* 4475.
production, *Staphylococcus aureus*, imitation cheese 5381.
production, *Staphylococcus aureus*, mastitis isolates, cattle 231.
production, *Staphylococcus aureus*, phage typing, serotyping, clinics, foods 4479.
production, *Yersinia enterocolitica*, food contamination 8753.
purification, characterization, *Escherichia coli* 232.
Salmonella, detection methodology, CHO cells use 1933.
Salmonella weltevreden, biosynthesis, purification 2765.
Staphylococcus, detection, enzyme-linked immunosorbent assay 1947.
Staphylococcus, passive reverse hemagglutination, detection food contamination
7578.
Staphylococcus, purification, characterization 8758.
Vibrio mimicus clinical isolates, purification, characterization 8750.

Enteroviruses,
antibodies, serum, detection, radioimmunoassay 8448.
association, suspended matter, microbial pollution, lakes 9255.
concentration, surface water, water quality, effects on 5853.
detection, enzyme-linked immunosorbent assay methodology, serum, man 5010.
detection, nucleic acids hybridization analysis, coxsackievirus B3 DNA use 4979.
disinfection, heat+hydrogen peroxide, septic tanks effluents 9243.
disinfection, peracetic acid, sewage effluents 6695.
enumeration, activated sludge, characterization 4930.
indicator species, microbial pollution, seasonal variations, coastal waters,
beaches 6706.
isolation, *Callinectes sapidus*, concentration, methodology 2431.
isolation, waste water, use, mammalian cells, cell lines 4150.
levels, detection methodology, surface water, drinking water, reviews 2384.
levels, disease transmission, ground water, reviews 2385.
levels, measuring techniques, drinking water, waste water, lakes, marine
environment 7532.
microbial pollution, comparison, bacteria indicator species, swimming pools,
Romania 2409.
microbial pollution, drinking water, lakes, Mexico 7526.
microbial pollution, drinking water, phages use pollution indicators association
8425.
microbial pollution, environmental monitoring, measuring techniques, reviews
2387.

ntrovirus, (continued)

microbial pollution, ground water, waste water irrigation 5852.
microbial pollution, wastewater treatment, disinfection, ozone 2372.
reduction, wastewater treatment 6676.
removal, surface water, water treatment, Netherlands 4953.
sewage, inactivation, role, ozone 4928.

ntrovirus (bovine),

inactivation, slurries, pigs, factors affecting digestion (anaerobic) 6684.

ntrovirus (human) 70,

antiviral activity, antibodies+interferon, conjunctiva cell culture, man 2227.

ntrophthora culicis

pathogenicity, *Anopheles stephensi*, *Culex pipiens quinquefasciatus* 138.

ntrophthora gressera,

double-stranded RNA viruses, role virulence, biological control, *Christoneura*

ntrophthora gammæ,

isolation, culture, pathogens, biological control, Noctuidæ 6088.

ntrophthora planchoniana,

biological control, pathogenicity, field trials, Aphididae 5230.

ntrophthora sp.

cell culture methodology 5938.

ntrophthora sp.

biological control, research programs, Aphididae 5232.

ntropovirus,

infection, use biological control, *Arphia conspersa*, *Melanoplus sanguinipes*,

ntropovirus,

Locusta migratoria 5905.

ntropovirus,

methodology, bacteria, ATP measurements, meat contamination 3304.

ntropovirus,

rumen anaerobic bacteria, inhibition, reducing agents, titanium citrate, media

ntropovirus,

(culture) 9301.

ntropovirus,

antigens, cytomegalovirus (human), vaccines, immunity (cell-mediated), immunity

ntropovirus,

(humoral), guinea-pigs 4072.

ntropovirus,

Escherichia coli defective mutant, β -lactamase biosynthesis, excretion 2601.

ntropovirus,

mutants, *Escherichia coli*, *Pseudomonas aeruginosa*, sensitivity, association,

ntropovirus,

antibiotics, preservatives, cell membranes role 3080.

ntropovirus,

mutation, enhancement, antibiotics susceptibility, *Neisseria gonorrhoeae*,

ntropovirus,

clinical isolates 5761.

ntropovirus,

proteins, influenza virus, isolation, immunogenicity, vaccines production, mice

ntropovirus,

6620.

ntropovirus,

infection management, soil microorganisms, nutrient dynamics, pasture 8963.

ntropovirus,

nitrogen fixation, acetylene reduction, hydrogen gas production, Leguminosae

ntropovirus,

2966.

ntropovirus,

Rhizobium, nitrogen fixation, acetylene reduction, nitrogen-15, Trifolium

ntropovirus,

385.

ntropovirus,

environmental conditions, burns unit, epidemics *Staphylococcus aureus*, man 2410.

ntropovirus,

environmental effects, aflatoxins contamination *Zea mays* hybrids, endosperm characterization association

ntropovirus,

8724.

ntropovirus,

ectomycorrhizas inoculation, trees response association, reviews 350.

ntropovirus,

Myxomycetes, soil, altitude, USA, Rocky Mountains 387.

ntropovirus,

pathogenesis, grey mold, *Botrytis cinerea*, *Phaseolus vulgaris* 1114.

ntropovirus,

plants response association vesicular-arbuscular mycorrhizas, reviews 390.

ntropovirus,

Pseudomonas putida continuous culture, films formation 669.

ntropovirus,

Pythium ultimum survival, soil 3928.

ntropovirus,

Cladospirum carpopodium, conidia release, disease spread, scab 272.

ntropovirus,

disease resistance, screening, *Phytophthora cryptogea*, root rot, *Carthamus*

ntropovirus,

tinctorius 7970.

ntropovirus,

effects on spore germination, Homobasidiomycetes, ectomycorrhizas 2130.

ntropovirus,

forests soil, effects on bacteria enumeration 1231.

ntropovirus,

progeny activity, nitrogen-fixing bacteria, rhizosphere, pasture 9018.

ntropovirus,

plant diseases, epidemiology 1087.

ntropovirus,

population levels, ecological distribution, actinomycetes, soil, Australia 8991.

ntropovirus,

relationship ureides levels, nitrogen fixation, acetylene reduction, Glycine max

ntropovirus,

2162.

ntropovirus,

vesicular-arbuscular mycorrhizas, roots colonization, *Atriplex gardneri*, deserts

Enzyme immunoassay, (continued)

hepatitis B surface antigen 4983.

herpes simplex virus seroepidemiology, man, serum, cerebrospinal fluid 614.

immunodiagnosis, gonorrhea 2492.

kanamycin labelling 3109.

La Crosse virus antigens, *Aedes triseriatus* 609.

membrane filtration, enumeration, *Staphylococcus aureus*, food, methodology 6968.

methodology, antibodies detection, *Campylobacter fetus* subsp. jejuni enteritis,

man 782.

methodology, antibodies detection, varicella-zoster virus membranes antigens

5880.

methodology, immunoglobulin G detection, measles virus hemagglutinins 8442.

methodology, *Streptococcus* group B antigens detection, man 5065.

Neisseria gonorrhoeae antigens detection 4180.

paper, ribgrass mosaic virus detection, *Brassica chinensis* 1147.

parainfluenza virus serotypes, cell culture 602.

rotavirus detection, comparison, counter immunoelectrophoresis, electron

microscopy 4980.

rotavirus detection, comparison immunoelectron microscopy 611.

rotavirus detection, methodology comparison 1558.

substrates, measuring techniques, *Haemophilus influenzae* poly(ribosephosphate)

724.

use, antigens, diagnosis, parainfluenza virus infection, man 9276.

Enzyme polymorphism,

Hordeum spontaneum, plant breeding, correlation powdery mildew disease

resistance, *Erysiphe graminis* f.sp. hordei 7209.

Enzyme-linked immunosorbent assay,

antibodies detection, hemorrhagic enteritis virus, turkeys 4153.

antibodies detection, immunodiagnosis, infection, *Chlamydia trachomatis*,

Chlamydia psittaci 4183.

antibody response, fowl cholera vaccination, chickens 3343.

antibody response, mumps virus vaccines, comparison neutralization 2436.

antigens comparison, immunodiagnosis, African swine fever virus 1542.

antigens detection, *Bacteroides fragilis*, experimental infection, urine, rats

6772.

biotin-avidin enhancement, detection, herpes simplex virus, man 4154.

Brucella abortus antigens detection, secretion, vagina, cattle 6763.

Candida albicans antigens detection 2523.

capture monoclonal antibodies, coronavirus (bovine) detection, man 4167.

chemiluminescence, diagnosis, viruses infection 1562.

Citrus, detection, apple mosaic virus, prunus necrotic ringspot virus, prune

dwarf virus 6249.

Clostridium tetani antitoxins 5383.

comparison, agglutination, detection, antigen Vi, *Salmonella typhi*, use,

diagnosis 663.

comparison, counter immunoelectrophoresis, radioimmunoassay, passive reverse

hemagglutination, sensitivity, specificity, hepatitis B surface antigen 7568.

comparison, electron microscopy, immunoelectron microscopy, use, detection,

rotavirus (human), feces 3236.

comparison, fluorescent antibody test, characterization, immunity,

varicella-zoster virus, man 636.

comparison, *Haemophilus influenzae* detection methodology, man 2465.

comparison, hemagglutination inhibition, detection, rubella virus, man 5016.

comparison, radioimmunoassay, detection, *Haemophilus influenzae* antibodies 2515.

coronavirus antibodies detection, radioimmunoassay comparison 2430.

detection, adenovirus antigens 623.

detection, adenovirus (avian), immunoglobulin G, identification, serotypes 5014.

detection, antibodies, avian infectious bronchitis virus, infectious bursitis

virus, Newcastle disease virus, methodology 5017.

detection, antibodies, endotoxins, gram-negative bacteria, blood 1939.

detection, antibodies, Epstein-Barr virus antigens 6739.

detection, antibodies, use, protein M, influenza virus 1541.

detection, antigens, antibodies, arenavirus 8455.

detection, *Bacteroides fragilis* antigens, urine, man 7604.

detection, barley yellow dwarf virus, Gramineae 8802.

detection, brom mosaic virus, seed-borne diseases, transmission (seed), seeds,

Triticum aestivum 8787.

detection, *Brucella ovis* antibodies, sheep, comparison complement fixation 4204.

detection, *Chlamydia* antigens 5068.

detection, *Chlamydia*, immunoglobulin G, immunoglobulin M 760.

detection, chloramphenicol, methodology 3110.

detection, *Clostridium difficile* toxins antibodies 230.

detection, *Clostridium tetani* antitoxins, serum, man 4488.

detection, cytomegalovirus (human) antibodies 1551.

detection, *Escherichia coli* enterotoxins 1937.

detection, *Escherichia coli*, enterotoxins 7123.

detection, *Escherichia coli*, enterotoxins, methodology 8748.

detection, hepatitis B e antigen 2441.

detection, hepatitis B surface antigen 4984.

detection, herpes simplex virus antibodies 631.

detection, herpes simplex virus 1, antigens, cerebrospinal fluid, encephalitis,

man 652.

detection, herpesvirus (equine) 1 antigens 3246.

detection, immunoglobulin G, *Mycobacterium tuberculosis*, proteins, cerebrospinal

fluid, meningitis, man 6773.

detection, Leguminosae plant viruses 7927.

detection, *Mycobacterium tuberculosis*, leprosy 5057.

detection, *Mycobacterium tuberculosis*, leprosy 5901.

detection, *Mycoplasma hyopneumoniae* antibodies, comparison, indirect

hemagglutination, complement fixation 740.

detection, *Neisseria gonorrhoeae*, genital tract, methodology, comparison, man

7607.

detection, *Pasteurella multocida*, antibodies, chickens 5074.

detection, potato leaf roll virus, potato virus Y, *Solanum tuberosum* 5883.

detection, potato virus Y, potato virus A, tubers, *Solanum tuberosum* 4538.

detection, prune dwarf virus infection, *Prunus cerasus* 8804.

detection, *Prunus necrotic ringspot virus* mosaic disease, *Prunus avium*, use,

disease control, USA, Washington 3812.

detection, *Pseudomonas aeruginosa* sodium alginate extracellular polymers

antibodies 761.

detection, respiratory syncytial virus antibodies 1554.

detection, respiratory syncytial virus, methodology 1561.

detection, rotavirus, coronavirus, feces, cattle, comparison, electron microscopy

8434.

detection, rotavirus (human), feces, man 641.

detection, *Staphylococcus enterotoxins* 1947.

Enzyme-linked Immunosorbent assay, (continued)

- detection, T-2 toxin, *Fusarium sporotrichoides*, *Zea mays* 5365.
detection, tobacco mosaic virus, tobacco ringspot virus, dieback, *Fraxinus americana* 8951.
detection, tomato ringspot virus infection, *Prunus persica* 3813.
diagnosis, pneumonia, *Mycoplasma hyopneumoniae*, pigs 5894.
diagnosis, respiratory syncytial virus infection, children 1564.
enumeration, *Treponema pallidum*, methodology 5034.
equipment, microorganisms contamination, environmental hygiene 2413.
food contamination, enterotoxins, *Staphylococcus* 8737.
+ganglioside GM1, detection, *Escherichia coli* enterotoxins 1960.
hepatitis B e antigen 5012.
identification, infectious pancreatic necrosis virus 2445.
immunity detection, Newcastle disease, chickens 3244.
immunodiagnosis, infectious mononucleosis, Epstein-Barr virus, immunoglobulin M, heterophil antibody 603.
immunodiagnosis, influenza B virus, comparison hemagglutination inhibition 605.
immunodiagnosis, *Mycoplasma pneumoniae* infection 657.
immunodiagnosis, *Pseudomonas corrugata*, necrosis, *Lycopersicon esculentum* 8835.
immunodiagnosis, Rocky Mountain spotted fever 2471.
immunodiagnosis, rotavirus, false-positives 8438.
immunodiagnosis, syphilis 712.
immunoglobulin G, *Coxiella burnetii*, Q fever, man 2496.
immunoglobulin G detection, *Mycobacterium paratuberculosis* reactivity 3324.
immunoglobulin M detection, cytomegalovirus (human) diagnosis, man 6742.
immunoglobulin M detection, hepatitis A, man 4156.
influenza virus neuraminidase antibodies detection 1567.
Japanese encephalitis virus, immunoglobulin M, immunoglobulin G, serum, experimental infection, pigs 5011.
killed dependent detection, *Legionella pneumophila* antibodies 2512.
lipid A fractions, thin-layer chromatography 5064.
measles virus immunity detection, man 4168.
measuring techniques, antibody response, *Aspergillus fumigatus* 2533.
methodology, α antigen detection, serum, man 8456.
methodology, *Brucella abortus* antibodies detection, pigs serum 5063.
methodology, pseudomonas fluid immunoglobulin G measurement, *Mycobacterium tuberculosis meningitis*, man 7590.
methodology, *Clostridium tetani* antibodies, man 780.
methodology comparison, latex agglutination, rubella virus antibodies detection 1540.
methodology, cytomegalovirus immunoglobulin G quantification, man 649.
methodology, detection, equine infectious anemia virus, antigens, antibodies 4162.
methodology, enterovirus detection, serum, man 5010.
methodology, *Francisella tularensis* immunoglobulins detection, man 2468.
methodology, grapevine fanleaf virus detection, Xiphinema index vectors 3255.
methodology, hemorrhagic enteritis virus antibodies detection, chickens 9281.
methodology, hepatitis core antigen immunoglobulin M, man 6738.
methodology, immunoglobulin M detection, rubella virus specificity 8446.
methodology, immunoglobulin M detection, *Treponema phagedenis* flagella, syphilis, rabbits 765.
methodology, methanogenic bacteria measurements 9316.
methodology, mumps, seroepidemiology standardization, man 7567.
methodology, *Mycobacterium paratuberculosis* protoplasm peptides, paratuberculosis diagnosis, cattle 4185.
methodology, plant viruses binding 8440.
methodology, plant viruses quantitation 8445.
methodology, respiratory syncytial virus antibodies, comparison, complement fixation, neutralization 5036.
methodology, rotavirus (human) detection, feces, neonates, man 8444.
methodology, *Salmonella* detection, milk contamination 766.
methodology, *Staphylococcus aureus* α -toxin detection 4186.
methodology, *Staphylococcus aureus* antigens detection 1596.
methodology, *Staphylococcus aureus* peptidoglycans detection, penicillin administration association 3344.
methodology, *Streptococcus* group B antibodies, serum, man 3259.
methodology, use, antigens, *Treponema pallidum* 2508.
monoclonal antibodies, identification, *Escherichia coli*, pilli 5067.
Mycoplasma pneumoniae antibodies detection, comparison complement fixation 1863.
nitrocellulose, adenovirus antigens, antibodies 5020.
nitrocellulose, enterotoxins detection, *Escherichia coli*, *Vibrio cholerae* 4179.
non-A, non-B hepatitis 6748.
nuclear polyhedrosis virus detection methodology, *Lymantia dispar* 7561.
optimization, *Ureaplasma urealyticum* antibodies detection 4178.
Prunus, detection, prunus necrotic ringspot virus, prune dwarf virus 6251.
Rhinovirus melioli, inoculum detection, soil 4174.
rotavirus (human) detection, feces 1552.
rotavirus (human) immunoglobulin G serum levels, statistical analysis, man 4166.
rotavirus (human) incidence, gastroenteritis, children, Venezuela 4165.
Salmonella minnesota immunoglobulin G, rabbits 2459.
Salmonella typhimurium, *Salmonella* albany, poultry 8759.
screening, cytomegalovirus antibodies, blood donors 2448.
screening, seeds, peanut mottle virus infection, transmission (seed), *Arachis hypogaea* 8763.
serum levels, rubella virus immunoglobulin M, man 618.
specificity, immunoglobulin G antibody response, coxsackievirus B 2438.
standardization, immunoglobulin M, immunoglobulin G, tick-borne encephalitis virus, serum levels, man 2447.
Streptococcus group B 721.
Streptococcus sanguis pilli antigens 1621.
T cell leukemia virus 4163.
tobacco mosaic virus RNA detection, plants, tissues, protoplasts 4499.
tuberculosis diagnosis, man 4200.
use antibodies, aflatoxin Q1 3743.
use, detection, avian encephalomyelitis virus antibodies, chickens 5019.
use, detection, potato virus, *Solanum tuberosum* 8832.
use, Epichloe typhina sampling methodology, *Festuca arundinacea* 796.
use, fowl plague virus, purification methodology 6751.
use structural proteins, African swine fever virus 1547.
Vibrio cholerae cell surface antigens 1624.

Enzymes

- activity, catabolism, bacteria, reviews 7821.
applications, biotechnology, industries, books, microorganisms 3373.
bacteria, dimethyl 3-benzoyloxycarbonylaminoglutamic acid hydrolysis, stereoselectivity, production, precursors, carbanenones, negamycin 2308.
bioassays, polysaccharides, bacteria 3528.

Enzymes, (continued)

- biodegradation, phenol, toluic acid, p-cresol, *Alcaligenes eutrophus* 4422.
bioreactors, mass transfer, mathematical models 6026.
bioreactors, use, L-alanine synthetase 4261.
biosynthesis, *Hansenula polymorpha* peroxisomes 4276.
biosynthesis inhibition, *Staphylococcus aureus*, lincomycin antibacterial activity 9197.
biosynthesis, regulation, industrial strains, bacteria 2603.
biotechnology, books 5098.
biotechnology, cloning vectors, DNA recombination 4297.
biotechnology, thermophilic bacteria 2628.
biotechnology, thermophilic bacteria 7794.
carbohydrates degradation, brown rot, *Poria placenta* 6820.
cell walls degradation, *Penicillium steckii*, cocoa beans biodegradation association 2823.
cellulolytic microorganisms, macromolecules hydrolysis, pretreatment effects on 150.
digestion, phloem, isolation mycoplasma-like organisms, *Catharanthus roseus* 281.
Erwinia carotovora, *Pseudomonas*, separation, cells, extracts, ultrafiltration, factors affecting 6019.
ethanol fermentation, distilleries, breweries 161.
fermentation, comparison, *Alcaligenes*, *Nocardia opaca*, *Xanthobacter autotrophicus* 150.
fibrinolysis, production, *Cochliobolus lunatus* 3465.
food industry, safety regulations 43.
food processing, food by-products 5319.
fungi, pulp mills, lignin hydrolysis, paper, starch hydrolysis, paper mills 49.
glycans biosynthesis, riboflavin, effects on, *Streptococcus mutans* 3157.
hydrolysis, crop residues, radiation+chemicals pretreatment effects on 1044.
hydrolysis, wood, sugars fermentation, ethanol production 7814.
immobilization methodology, reviews 6032.
isolation, disintegration methodology, yeasts, bacteria 4303.
kinetics, industries applications 40.
kinetics, industries applications, technology 42.
kinetics, industries, technology applications 41.
location, occupational exposure, industries, safety regulations 45.
levels, biosynthesis, acetic acid, butyric acid, acetone, butanol, *Clostridium acetobutylicum* 859.
lignification, *Nicotiana tabacum*, tobacco mosaic virus infection, hypersensitive response 7193.
lignin degradation, purification, characterization, *Phanerochaete chrysosporium* 3452.
low molecular weight inhibitors, antibiotics, reviews 490.
melanoidin color removal, *Coriolus* 3471.
metabolism, production, butyric acid, acetic acid, *Clostridium acetobutylicum* 5113.
methanol oxidation, biosynthesis, *Hansenula polymorpha* 929.
microorganisms, digestion (anaerobic), digestion (aerobic), waste treatment, industrial wastes 547.
microorganisms, drilling fluids, viscosity, oil and gas industry, wastewater treatment, biodegradation, oil spills, marine environment 180.
microorganisms, industries, books 839.
microorganisms, mash fermentation, breweries 163.
microorganisms, oils extraction, oilseed crops 54.
microorganisms, physicochemical properties, activity, surveys, industries 58.
microorganisms, production color compounds, flavor compounds, food industry 20.
4-nitrophenol hydrolysis, *Nocardia* 7683.
oxidation, polyethylene glycol, bacteria 7678.
penicillin acylase like, kinetics, thermodynamics, bacteria 4315.
pesticides biodegradation, microorganisms, reviews 1019.
pharmaceuticals production, fungi, bacteria 8651.
polysaccharides hydrolysis, characterization, bacteria 7763.
polyvinyl alcohol oxidation, purification, characterization, *Pseudomonas cell* membranes 1742.
preparation, purification, immobilization, stabilization, books 3375.
preparations efficacy, mirin biosynthesis, alcohol concentration relationship 992.
production, *Aspergillus restrictus*, association, water activity, detection, seeds, contamination 1166.
production, association, genetic engineering, microorganisms 4137.
production, microorganisms, genetic engineering 7730.
production, microorganisms, reviews 2827.
production, *Trichoderma reesei*, carbon sources, media (culture) 1803.
proteins, separation, filtration, reviews, microorganisms 8586.
protoplasts, lignin biodegradation, *Fomes annosus* 8673.
purification, characterization, methodology, reviews 4306.
ratio, immobilized enzymes 4335.
regulatory mechanisms, bacteria, industrial applications 851.
role, *Aspergillus fumigatus* biodegradation, *Saccharum officinale* bagasse 186.
Ruminococcus albus, solubilization, cell walls, *Medicago sativa* 5117.
separation techniques, downstream processing 1600.
Staphylococcus aureus, *Staphylococcus epidermidis*, clinical isolates, purification, characterization, role, antibiotic resistance 5165.
Sterium frustulosum, biodegradation, wood, lignin 1022.
thermal stability, genetic engineering, food industry, thermophilic microorganisms 3495.
thermal stability, immobilized cells, *Caldariella acidophila*, ultrafiltration membranes 764.
Thiobacillus, isolation, characterization, thiosulfic acid oxidation 942.
toxicity testing, safety regulations, food industry, microorganisms 44.
trypsin like, characterization, immobilization, *Streptomyces* 7689.
use assays, clinical microbiology, microorganisms 46.
use, penicillins synthesis 4385.

Eperua faicata

leaves, decomposition, soil microorganisms 2917.

Ephestia caudata

biological control, *Bacillus thuringiensis* 4386.

Epi-chlamydocin

synthesis 1838.

8-Epi-thienamycin

structure, *Streptomyces cattleya* 1427.

Epichloe typhina

infection, *Festuca arundinacea*, fungicides use treatment 8119.

infection, *Festuca arundinacea*, incidence, disease transmission, USA, Kentucky 7979.

sampling methodology, enzyme-linked immunosorbent assay use, *Festuca arundinacea*

Epichloa typhina, (continued)

796.
Epilocus um purpurensens,
 canker, Rubus, USA, Ohio 8846.
Epilocus nigrum,
 biodegradation, Alnus leaves, aquatic environment 184.
Epilocus rot,
 epicotyl rot, disease resistance, Pisum sativum 6287.
Epidemic hemorrhagic fever virus,
 encapsulation, cell culture, rats, Apodemus agrarius 5764.
Epidendrum bogense,
 endomycorrhizas, acid phosphatase activity 8199.
Epidermis,
 cell culture, nuclear polyhedrosis virus replication, inoculum production,
 biological control, Lepidoptera 3249.
Epidermophyton foccosum,
 antifungal activity, mangostin, derivatives, isolation, Garcinia mangostana 4783.
 glycerol kinase, purification, characterization, molecular weight 5987.
Epidictylo F,
 Dicotyla dichotoma, characterization, antimicrobial activity 3068.
Epitheniamycin,
 synthesis 7466.
Eptozotic hemorrhagic disease virus,
 antigens preparation methodology, use, gel diffusion 3240.
Epoxidation,
 microorganisms 7653.
Epoxyenone,
 macrolide antibiotics, chemical modification, deepoxidation 5788.
 macrolide antibiotics, deepoxidation, products, antibacterial activity 5789.
Epstein-Barr virus,
 antigens, antibodies, detection, enzyme-linked immunosorbent assay 6739.
 antigens, immunoprecipitation, methodology 647.
 immunoglobulin M, detection, use, enzyme immunoassay 1568.
 infection, lymphoblastoid cell lines, (E)-5-(2-bromovinyl)-2'-deoxyuridine,
 antifungal activity 4027.
 infectious mononucleosis, immunodiagnosis, heterophil antibody, enzyme-linked
 immunosorbent assay 603.
 man antibodies, immunodiagnosis, autoradiography, nasopharynx carcinoma, man
 4992.
 Paul-Bunnell antibody, detection, use, horses erythrocytes sialoglycoproteins
 1563.
 replication inhibition, 9-(1,3-dihydroxy-2-propoxymethyl)guanine antiviral
 activity 4761.
 transformed cells, lymphocytes B, production, monoclonal antibodies, association,
 Plasmodium falciparum, erythrocytes, man, methodology 633.
Equine infectious anemia virus,
 detection, antigens, antibodies, enzyme-linked immunosorbent assay methodology
 4162.
Eremochloa ophiuroides,
 white rot, detritus effects on pathogenesis, fungi 6785.
Ergosta-5,7-diene-3 β ,23 β -diol,
 Saccharomyces cerevisiae, isolation, new records 945.
Ergosterol,
 biosynthesis, inhibition, antifungal activity, bifonazole, clotrimazole, yeasts,
 dermatophyte fungi 8314.
 biosynthesis, naffline, antifungal activity, Candida albicans 5734.
 levels, post-harvest decay indicators, fungal flora, corn, rice 2051.
 plasma membranes, miconazole antifungal activity, Candida albicans 4757.
 derivatives structure 1824.
 Saccharomyces cerevisiae, biosynthesis, cytochrome P-450 role 944.
 use, detection, Drechslera graminea, infection, Hordeum vulgare 7981.
Ergot,
 alkaloids, biosynthesis, characterization, Aspergillus tamari 5254.
 alkaloids, detection, grain, flour, use, liquid chromatography 7050.
 imides, Hypomyces aurantius, biosynthesis, new records 4384.
 alkaloids, production, biotechnology, reviews, fungi 4379.
 alkaloids, production, Claviceps purpurea immobilization, methodology 969.
 Claviceps fusiformis, morphology, pathogenesis, Penicillium americanum 3829.
 pathogenicity, Claviceps fusiformis, Cenchrus ciliaris 5421.
 Penicillium americanum, disease control, pollen management 1990.
Ergotamine,
 Claviceps purpurea, biosynthesis, cell-free system 968.
Ergotism,
 Claviceps microcephala, incidence, Penicillium typhoides, atmospheric conditions
 effects on 5427.
Eriophyes tulipae,
 Trichum aestivum resistance association, role, disease control, streak 8075.
Erpex lacteus,
 cellulase, purification, characterization 938.
Erwinia,
 antagonism, Phytophthora cactorum, herbicides effects on 2177.
 biodegradation, pulp mills, effluents 1467.
 black rot, Cruciferae, epidemiology, Thailand 287.
 etiology, Populus canker, Canada 2114.
 plant diseases, diagnosis 3780.
 soft rot, post-harvest decay, antagonism, Pseudomonas putida, biological control,
 Solanum tuberosum 8112.
 soft rot, transmission (seed), Solanum tuberosum 8870.
 Solanum tuberosum, phytopathogenic fungi, Erwinia, rhizosphere, Pseudomonas
 siderophores antagonism 2830.
Erwinia amylovora,
 extracellular polymers, polysaccharides, characterization, infection, tissue
 culture, Malus pumila 1835.
 fire blight, Pyrus communis, conferences 5947.
 fire blight, Pyrus communis, disease control 5443.
 fire blight, Pyrus communis, disease transmission, vectors, Apis 5442.
 fire blight, Pyrus communis, epidemiology 5444.
 fire blight, Pyrus communis, epidemiology, detection 5462.
 fire blight, Pyrus communis, legislation, disease control 5463.
 fireblight, disease resistance, plant breeding, cultivars, Pyrus communis 8062.
 fireblight, host plants, symptoms, disease control, reviews 7166.
 fluorescence diagnosis, plant diseases 2773.
 plant diseases, detection, immunoassays 5441.
 plant diseases, diagnosis, characterization 3776.
 plant diseases, Rosa belgium 5461.
 virulence, Malus pumila, characterization 2803.

- Erwinia carotovora**,
 amidase, isolation, characterization 1756.
 blackleg, Solanum tuberosum tubers, disease control, heat treatments 1195.
 enzymes, separation, cells, extracts, ultrafiltration, factors affecting 6019.
 extracellular enzymes, α -L-arabinofuranosidase, characterization 5133.
 infection, tubers, Solanum tuberosum 8031.
 pectinolytic enzymes, retting, bark, Broussonetia kazinoki 7680.
 Populus canker etiology, Canada 2114.
 soft rot, plants, characterization 3775.
 soft rot, Solanum tuberosum, tubers, comparison, stems, Chile 2015.
 stalk rot, Helianthus annuus, susceptibility association age, USA, North Dakota
 2820.
Erwinia carotovora subsp. atroseptica,
 blackleg disease resistance screening projects, solanum tuberosum 5483.
 blackleg, Solanum tuberosum 2027.
 blackleg, Solanum tuberosum, disease resistance 2025.
 blackleg, Solanum tuberosum, effects on, growth, yield 2026.
 blackleg, synergism, Verticillium dahliae wilt, subsp. atroseptica, Solanum
 tuberosum 7191.
 detection, enzyme immunoassay 8464.
 experimental infection, Solanum tuberosum, injection systems 4495.
 soft rot, disease resistance, plant breeding, germplasm, Solanum tuberosum 7210.
 soft rot disease resistance, Solanum tuberosum 4581.
 soft rot, soil moisture, soil temperature, tubers, Solanum tuberosum 2818.
Erwinia carotovora subsp. carotovora,
 blackleg, synergism, Verticillium dahliae wilt, subsp. atroseptica, Solanum
 tuberosum 7191.
 isolation, pathogenicity, Cyclamen persicum soft rot 3843.
 relationship, Verticillium dahliae, infection, pathology, Solanum tuberosum 4533.
 soft rot, disease resistance, plant breeding, germplasm, Solanum tuberosum 7210.
 soft rot disease resistance, Solanum tuberosum 4581.
 soft rot, Solanum tuberosum, pathogenesis 4562.
 virulence, pathogenesis, Solanum tuberosum, stems 2817.
Erwinia chrysanthemi,
 host-pathogen interactions, Zea mays, disease resistance 3880.
 rot, Dieffenbachia maculata 5447.
Erwinia herbicola,
 biodegradation, leather, museums, Kuwait 1024.
 detection, media (culture), feces, man 1659.
 ice nucleation activity, Citrus sinensis, Citrus aurantium 2805.
 nitrogen-fixing bacteria, Saccharum 5652.
 plant diseases, diagnosis, characterization 3776.
 Populus canker etiology, Canada 2114.
Erwinia rubrifaciens,
 pathogenicity, Nicotiana tabacum, hypersensitive response 2074.
Erwinia salicis,
 watermark disease, disease transmission, propagules, Salix alba 363.
Erwinia ascalis,
 pathogens, pathogenicity, use biological control, Aedes cantator 2665.
Erwinia neopaphis,
 biological control, pathogenicity, field trials, Aphididae 5230.
 biological control, pathogens, field trials, Sitophilus avenae, Metopolophium
 dirhodum 5229.
 inoculum production, biological control, Aphididae 5231.
Erwinia pieris,
 biological control, pathogenicity, Pieris rapae, host range, Insecta 6906.
Erysipelothrix rhusiopathiae,
 EDTA-tromethamine + antimicrobial agents antibacterial activity 4816.
 pigs, antibiotic resistance, characterization 4695.
Erysipales,
 powdery mildew, epidemiology, spectrophotometry 7917.
Erysiphe,
 powdery mildew, biological control, hyperparasitism, Dissoconium aciculare 8911.
Erysiphe elchioracearum,
 plant diseases, Helianthus tuberosus, effects on yield 5457.
 powdery mildew, Cucumis sativa, Czechoslovakia 3836.
 powdery mildew, host-pathogen interactions, disease resistance, inheritance,
 plant breeding, Curcubita moschata 3862.
 powdery mildew, inhibition, Nicotiana glutinosa diterpenes, foliar applications,
 Nicotiana tabacum 2076.
 powdery mildew, Lactuca sativa 1159.
Erysiphe graminis,
 infection, Hordeum vulgare, disease resistance, genetic control 2067.
 mancozeb + curzate antifungal activity 2085.
 powdery mildew, disease resistance, genetic variance, plant breeding, Hordeum
 vulgare 316.
 powdery mildew, Hordeum, disease resistance 5501.
 powdery mildew, Hordeum vulgare, disease control, use, antitranspirants 291.
 powdery mildew, incidence, cultivars mixed culture, Hordeum vulgare 2841.
 powdery mildew, incidence, effects on, yield, Triticum aestivum, Bulgaria 7959.
 powdery mildew, pathogenicity genes, host-pathogen interactions, disease
 resistance genes, Hordeum vulgare 2861.
 powdery mildew, Triticum aestivum, disease resistance plant breeding correlation
 triadimfon disease control 5502.
Erysiphe graminis f.sp. avenae,
 powdery mildew, disease resistance breeding, Avena sativa 307.
Erysiphe graminis f.sp. hordei,
 avirulent, inoculation, induction disease resistance, Hordeum vulgare 3882.
 avirulent strains, inoculation, disease control, powdery mildew, Hordeum vulgare
 2066.
 crop residues, Hordeum vulgare, Medicago sativa, smoke, antifungal activity 8319.
 infection, Hordeum vulgare leaves, polyribosomes translation activity 251.
 plant diseases, host-pathogen interactions, relative humidity effects on 1962.
 powdery mildew colonies enumeration, Hordeum vulgare 1129.
 powdery mildew disease resistance, correlation enzyme polymorphism, plant
 breeding, Hordeum spontaneum 7209.
 powdery mildew, disease resistance, plant breeding, Denmark, Hordeum vulgare
 2880.
 powdery mildew, disease resistance, plant breeding, germplasm, Hordeum spontaneum
 5496.
 powdery mildew, genotypes, virulence, host-pathogen interactions, Hordeum vulgare
 8791.
 powdery mildew, germ tubes, appressoria, penetration, host-pathogen interactions,
 Hordeum vulgare 8788.
 powdery mildew, Hordeum vulgare, disease resistance, genetic analysis, plant
 breeding association 8081.

Erysiphe graminis f.sp.hordei, (continued)

- powdery mildew, Hordeum vulgare, factors affecting conidia production 7957.
powdery mildew, Hordeum vulgare, factors affecting epidemiology 5422.
powdery mildew, incompatibility, Hordeum vulgare, carbon dioxide exchange 1130.
powdery mildew, inhibition ribulosebiphosphate carboxylase, carbon fixation enzymes, activity, Hordeum vulgare 5434.
- Erysiphe graminis f.sp.tritici**,
disease resistance, Triticum 1197.
powdery mildew, disease resistance, plant breeding, Triticum aestivum 8067.
powdery mildew, disease resistance, Triticum dicoccoides 5415.
powdery mildew, Triticum aestivum, disease resistance, genetic control 8101.
- Erysiphe phaeae**,
conidia spore germination, germ tubes formation, relationship, direct-light, comparison, Pisum sativum leaves light penetration 2774.
development, association, Pisum sativum resistance, comparison, susceptibility cultivars 245.
powdery mildew, pathology, Lens culinaris, insecticides, acaricides, antifungal activity 8917.
- Erysiphe polygoni**,
infection, Pisum sativum, disease control 8107.
powdery mildew, Pisum sativum disease resistance 1978.
- Erythrina sigmoidea**,
flavonones antibacterial agents, isolation, new records 1328.
- Erythrocytes**,
adsorption, structural proteins analysis, influenza virus, parainfluenza virus 5887.
Cytomegalovirus binding, use, passive hemagglutination, methodology 643.
glutaraldehyde fixation, hemagglutination, adenovirus (human) 2440.
horses, sialydoglycoproteins, use, latex agglutination, Epstein-Barr virus Paul-Bunnell antibody detection 1563.
monoclonal antibodies association, production, Epstein-Barr virus transformed cells, lymphocytes B, man, methodology 633.
- Erythromycin**,
antibacterial activity 2275.
antibacterial activity, clinical isolates, Streptococcus pneumoniae 9153.
antibacterial activity, in vitro, pediatrics, reviews 5783.
antibiotic resistance, Campylobacter fetus subsp.jejuni 446.
antibiotic resistance genetic markers, conjugation, plasmids deficiency, Streptococcus pyogenes 6426.
antibiotic resistance, R factors transfer, Streptococcus aureus 9044.
antibiotic resistance, Streptococcus aureus, relationship protein A biosynthesis 9054.
antibiotic resistance, Streptococcus aureus, reviews 9055.
antibiotic sensitivity testing, antibiotic resistance resistance, Streptococcus aureus 7424.
antibiotic sensitivity testing, Branhamella catarrhalis 9087.
antibiotic sensitivity testing, Branhamella catarrhalis 9163.
antibiotic sensitivity testing, dilution tests, Mycoplasma, animal isolates, chickens 3087.
antibiotic sensitivity testing, Neisseria gonorrhoeae 4804.
bactericidal activity, Legionella pneumophila, characterization 7451.
+benomyl+streptomycin, seed treatments, stimulation, Bradyrhizobium japonicum, soybean rhizosphere colonization, Glycine max 9017.
biosynthesis, role, methylmalonyl-CoA mutase, purification, characterization, Streptomyces erythraeus 2617.
biosynthesis, Streptomyces erythraeus, incorporation, carbon, oxygen 7452.
Clostridium perfringens drug sensitivity testing 3085.
comparison, 4'-deoxy-4'-sulfonamido-oleandomycin, derivatives, antibacterial activity, Streptococcus aureus 3121.
derivatives biosynthesis, Streptomyces erythraeus mutants 1402.
fungi biosynthesis 2254.
production, fermentation, lipids monitoring, optimization, Streptomyces erythraeus 6546.
stimulation IMP biosynthesis, Bravibacterium ammoniagenes 115.
stimulation IMP biosynthesis, Bravibacterium ammoniagenes 952.
Streptococcus pyogenes resistance 6402.
Streptococcus pyogenes resistance, clinical isolates 5722.
- Erythromycin A**,
high-performance liquid chromatography, fermentation, Streptomyces erythraeus 3111.
- Erythromycin B**,
high-performance liquid chromatography, fermentation, Streptomyces erythraeus 3111.
- Erythrosine**,
dyes, dentistry, antimicrobial activity, gram-negative bacteria, gram-positive bacteria, dental plaque isolates 7553.
- Escherichia**,
indicator species, population levels, water temperature, rivers, estuaries 4131.
- Escherichia coli**,
accumulation, elimination, Mercenaria mercenaria, characterization 5314.
acetolactate synthase, purification, physicochemical properties 1795.
6-oxymethylpenicillinic acid, antibacterial activity, association, stability 1399.
acyl carrier protein, secondary structure, tertiary structure, nuclear Overhauser effect 1.
acyl-CoA dehydrogenase (NADP⁺), purification, characterization, electrophoresis 7697.
acetylserine deaminase, 2,6-diamino-3-(2-hydroxyethoxymethyl)purine conversion, 9-(2-hydroxyethoxymethyl)purine production 902.
ADP-ribosyl transferase, nucleotide sequence, amino acid sequence, biosynthesis, comparison, Vibrio cholerae 7120.
adsorption, lauryl pyridinium iodide, bacteriostasis 2218.
airborne microorganisms analysis, trains bathrooms 579.
alcohol dehydrogenase, association ethanol utilization 5972.
alkaline phosphatase binding sites, N.M.R., crystallography 2587.
alkaline phosphatase, kinetics, computer programs use 2624.
D-amino acids, inhibition, β -lactam antibiotics antibacterial activity 9064.
aminoglycoside 2'-O-nucleotidyltransferase, activity, relationship, aminoglycoside antibiotics, antibiotic resistance 3028.
ampicillin resistance, ampicillin+colistin interaction 5772.
ampicillin, effects, plasmid pKM101, antibiotic resistance 7324.
antibacterial activity, acetylonyl salicylate 6464.
antibacterial activity, acitahizic acid +cephalexin antibiotic synergism 1390.
antibacterial activity, amoxicillin+clavulanic acid 4639.
antibacterial activity, ampicillin+sublactam 4843.
antibacterial activity, antibiotic B-371, structure-activity relationships 8338.

Escherichia coli, (continued)

- antibacterial activity, apalacillin 4840.
antibacterial activity, ciprofloxacin 4744.
antibacterial activity, cyanocycline A, inhibition nucleic acids biosynthesis 1430.
antibacterial activity, fludalanine+pentizidone 6454.
antibacterial activity, hydroxycinnamic acids 5728.
antibacterial activity, iontophoresis, association catheterization 734.
antibacterial activity, liposomes, containing, streptomycin, chloramphenicol, infected macrophages 513.
antibacterial activity, mezlocillin 4884.
antibacterial activity, p-hydroxybenzoic acid esters 1330.
antibacterial activity, peat extracts 7367.
antibacterial activity, penicillinase inhibition, effects on, association, Chlorophyta, Rhodophyta, marine environment 8305.
antibacterial activity, polymyxin B, temperature dependence 9198.
antibacterial activity, structure-activity relationships, analogs, 1-oxacephem, 1-thiacephem 4824.
antibacterial activity synergism, p-hydroxybenzoic acid+hexametaphosphate esters 3054.
antibacterial activity, synthetic sisamine, analogs 5787.
antibacterial activity, WIN 49375 9091.
antibacterial activity, 3-acetylamino-3-methoxy-2-azetidinone-1-sulfonic acid derivatives 1438.
antibiotic resistance 6409.
antibiotic resistance, β -lactamase, hydrolysis, antibacterial activity, (D,L)-7-(α -fluoroacylamino)cephalosporanic acids 9190.
antibiotic resistance, chloramphenicol effects on, sewage isolates 6437.
antibiotic resistance, correlation, kanamycin 8'-acetyltransferase activity, aminoglycoside antibiotics chemical modification 5714.
antibiotic resistance, feces isolates, sheep 7321.
antibiotic resistance, penicillin acylase, hydrolysis, α -aminobenzyloxy penicillin derivatives 7331.
antibiotic resistance, physicochemical properties, plasmid pKM1 4694.
antibiotic resistance, screening 7315.
antibiotic resistance, toxigenicity relationship 6424.
antibiotic sensitivity testing, animal isolates 7410.
antibiotic sensitivity testing, animal isolates, pigs 6500.
antibiotic sensitivity testing, avoparcin, flavomycin, virginiamycin 9215.
antibiotic sensitivity testing, clinical isolates, colibacillosis, sheep 5758.
antibiotic sensitivity testing, mecillinam, cefoxitin, gentamicin, cotrimoxazole, ampicillin, doxycycline, cephalothin, chloramphenicol 7440.
antibiotic synergism, sisomicin, +mezlocillin, +azlocillin 2271.
antibiotics antibacterial activity determination, counting methods 2239.
antigen O, polysaccharides structure 1826.
antigen O, polysaccharides structure 4364.
antimicrobial activity, antimicrobial agents, tissue culture, Pegnum harmfula 8336.
antimicrobial activity, atranorine 4781.
antimicrobial agents antibacterial activity, urine specimens 3048.
antiseptics antibacterial activity, surfactants effects on 9261.
apramycin resistance mechanisms 5718.
asparagine, amino acid composition, N-terminus, amino acid sequence 4322.
asparaginase, immobilized enzymes, blood immobilization, bioreactors 2575.
aspartate A:inotransferase amino acid sequence, comparison, pigs 6843.
aspartate ammonia-lyase, acetylation activation 1788.
aspartate carbanoyltransferase, spectrophotometry assays 937.
association, Hyaella azteca, methodology, characterization, drinking water, disinfection 6712.
- 5-azacytidine, stability, antibacterial activity 7360.
bacteriostasis, catecholamide, iron chelating agents 448.
bacteriuria isolates, identification methodology, drug sensitivity testing 2464.
batch culture, fluorescence, measuring techniques, growth rate 8475.
batch culture, glucose feeding, electrodes monitoring 676.
biassays, serum levels, tobramycin, netilmicin 486.
bioassays, soil, hydroxamic acid siderophores incidence 675.
biodegradation, resistance, heavy metals pollution 3680.
biomass formation, bioreactors, mathematical models, energetics 588.
biosynthesis, tryptophan synthase, β -D-galactosidase, D-serine dehydratase 3504.
carapenams, antibacterial activity, structure-activity relationships 7461.
carboxylesterase, purification, characterization 8557.
Carica papaya plant extracts antibacterial activity 2220.
catabolism pathway, evolution, enzymes activity, reviews 7821.
catalase, purification, characterization 8552.
cefazidime antibacterial activity, agar diffusion test 2259.
cell division conditional mutant, mecillinam effects on 3102.
cells growth, mathematical models 1597.
cephalothin antibacterial sensitivity testing, quality control 4628.
chemotaxis, ribitol dehydrogenase, ribitol nutrient deficiency 3444.
chloramines disinfection, pH effects on 9246.
chloramphenicol acetyltransferase, association, antibiotic resistance, chloramphenicol 3597.
clinical isolates, antibiotic resistance, ampicillin, tetracycline, gentamicin, drug resistance, sulfamethoxazole 4004.
clinical isolates, antibiotic resistance, correlation R factors 1313.
clinical isolates, antibiotic resistance, R factors 5709.
clinical isolates, azlocillin antibiotic resistance 5715.
clinical isolates, diarrhea, neonates, pigs, antibiotic sensitivity testing 5758.
clinical isolates, R factor, tetracycline resistance 8294.
cloning, gene expression, β -interferon, antiviral activity, characterization, man 2228.
cloning, Lactobacillus delbrueckii, malic acid, lactic acid, genes, role, wine, fermentation 2681.
cloning vectors, vaccines production, capsid protein expression, poliovirus 1 6605.
colicin B structure 3129.
colicin E8, colicin E9, isolation, characterization 3159.
colicin M, antibacterial activity, inhibition murein biosyntheses 7456.
coliforms indicator species, identification, incidence, water temperature relationship, lakes 557.
colonization factors antigens, hemagglutination, clinical microbiology 701.
concentrations, reservoirs, British Isles, models analysis 2401.
contamination, phase T4D lysis prevention, petroleum recovery, rocks 3986.
contamination, poultry carcasses, meat industry 1051.
contamination, poultry meat products 1049.

Escherichia coli, (continued)

contamination, rehydration solutions, characterization 4967.
 continuous culture, synchronous cell division, mathematical models 9294.
 continuous culture, monitoring, thermodynamics, calorimetry 6080.
 coupling factor 1, mutation effects on activity 898.
 coupling factor 1 subunits oxidative phosphorylation, characterization, comparison, *Salmonella typhimurium* 3440.
 coupling factor 1 subunits, stoichiometry, use monoclonal antibodies, immunoelectron microscopy 3479.
 cross-resistance, cinoxacin, ciprofloxacin, antibiotic DJ-6783, enoxacin, nalidixic acid, norfloxacin, oxolinic acid 6421.
 cystathionine γ -lyase, purification, methodology, characterization, reviews 4306.
 cytochrome d oxidation, sodium nitrate effects on, U.V. spectroscopy 2565.
 cytochrome d, redox potential, spectroscopy 4273.
 cytochrome, purification, characterization 3753.
 deoxyribosylpyrimidine photolysis, purification, characterization 2622.
 detection, food, bioassays 7844.
 detection, water, enterotoxins genes probes, DNA hybridization analysis 1087.
 detergents antibacterial activity, milk residues, pH, effects on 9264.
 3,4-dichloroaniline biodegradation, nitrate reduction 1611.
 dihydroipomide dehydrogenase, amino acid sequence homology, glutathione S-transferase, erythrocytes, man 6004.
 reductase (NAD(P)H), evolution, erythrocytes, man 6004.
 dihydroipomide dehydrogenase, 2-oxoisovalerate dehydrogenase, subunits, amino acid composition, comparison *Pseudomonas putida* 6831.
 diluents effects on viability 5073.
 diffusion-test, use, Mueller-Hinton agar 3077.
 DNA biosynthesis initiation, aminoglycoside antibiotics inhibition, mechanisms 7468.
 DNA gyrase inhibition DNA supercoiling, nalidixic acid antibiotics reaction mechanisms 6560.
 DNA repair, mutants, interaction, metronidazole 2312.
 DNA-binding protein multiple forms, N.M.R. 2562.
 DNA-binding protein, purification, characterization 7673.
 drug resistance, lysozyme, colicins production, hemolysis production 4706.
 drug resistance, nitrofurantoin, R factors, nitrofurantoin reductase 3029.
 drug resistance, norfloxacin, nalidixic acid 4700.
 drug resistance patterns, R factors incidence 3039.
 drug resistance plasmids incidence, Saimo gairdneri isolates 9072.
 drug resistance, R factors, incidence, animals isolates, clinical isolates 3021.
 elongation factor Ts, purification, affinity chromatography 8522.
 enterobacterial common antigen, agglutination, immunodiagnosis, infection 5911.
 enterotoxins, adsorption filter paper, hemolysis assays 4485.
 enterotoxins, assays methodology 3354.
 enterotoxins, biosynthesis, properties, antibiotics effects on 228.
 enterotoxins, detection, Eiken test, traveller's diarrhea clinical isolates 1938.
 enterotoxins, detection, enzyme-linked immunosorbent assay 1937.
 enterotoxins, detection, enzyme-linked immunosorbent assay 7123.
 enterotoxins, detection, enzyme-linked immunosorbent assay, methodology 8748.
 enterotoxins, detection, ganglioside GM1 + enzyme-linked immunosorbent assay 1960.
 enterotoxins, detection methodology 5380.
 enterotoxins, detection, nitrocellulose enzyme-linked immunosorbent assay 4179.
 enterotoxins, genes probes 5389.
 enterotoxins, homogeneity, amino acid composition 6212.
 enterotoxins, isolation, characterization, cattle isolates 8762.
 enterotoxins levels, sonication 1957.
 enterotoxins production, detection, feces, supernatants 1961.
 enterotoxins, purification, characterization 232.
 enumeration, frozen food, methodology 6181.
 enumeration, most probable number, food 3690.
 envelopes defective mutant, β -lactamase biosynthesis, excretion 2601.
 estuaries, phenotypes, genotypes, nitrobenzene, m-cresol, dibutyl phthalate, effects on 4961.
 Escherichia coli, characterization, isocitrate lyase, aldehyde dehydrogenase, induction, purification, characterization 4280.
 exodeoxyribonuclease III, use site-directed mutagenesis methodology 738.
 expression, interferon, antiviral activity, herpes simplex virus 1 4028.
 R factor R124, effects on membrane permeability, outer membranes, membrane proteins, antibacterial agents sensitivity 4724.
 R factor R773, homology, R factor R46, arsenic acid, resistance 3026.
 R factors, antibiotic resistance, dogs isolates 3010.
 R factors, dogs sensitivity 5718.
 R factors incidence, antibiotic resistance, relationship, antibiotics treatment, diarrhea, man 3034.
 R factors, tetracycline antibiotic resistance 2206.
 R factors transfer, *Pseudomonas aeruginosa*, antibiotic resistance, *Escherichia coli*, clinical isolates, neonates 9043.
 fatty-acid synthetase, amino acid sequence 900.
 food contamination, seafood, *Plasce* 8712.
 fuel cells, electron transfer, redox potential mediators 5243.
 fumarate hydratase, activity, L-malic acid production 6877.
 galactose-binding protein, maltose-binding protein, ligands binding 1726.
 galactose-binding protein, maltose-binding protein, concentration effects on 6028.
 β -D-galactosidase, immobilized enzymes, lactose hydrolysis, milk 8542.
 β -D-galactosidase immobilized enzymes, use cellulose beads 72.
 gene expression, glycoproteins, vaccines production, herpes simplex virus 6611.
 gene expression transposon Tn5 streptomycin, kanamycin resistance genes 442.
 genetic engineering, proteins production optimization, isolation, purification 3425.
 gentamicin, antibacterial activity, urine, pH, osmotic potential effects on 3108.
 gentamicin, antibiotic sensitivity testing, quality control, mathematical models 1400.
 gentamicin bacteriostasis, bone fatty acids, synergism, antagonism 4052.
 glucosaminephosphate isomerase, purification, characterization 6841.
 glucose fermentation, effects on cloacin excretion 2688.
 β -D-glucuronidase, assays, gas chromatography 3762.
 glutathione synthetase, purification, characterization 6849.
 glutathione-phosphate isomerase (glutamine-forming) activity, antipain inactivation 6043.
 growth, glucose nutrient deficiency, mathematical models, computer applications 4173.
 growth, measuring techniques, electrical impedance 681.
 growth, temperature effects on, hot-boning, beef 6959.
 growth, toxins production, sodium chloride effects on 8760.
 habekacin, antibacterial activity, inhibition protein biosynthesis, outer membranes damage 521.

Escherichia coli, (continued)

heat treatments, p-hydroxybenzoic acid antibacterial activity 1332.
 heat treatments, p-hydroxybenzoic acid esters antibacterial activity, magnesium effects on 3055.
 hemolysis, antibiotic resistance, isolation, mice 7316.
 homology, *Haemophilus parainfluenzae*, transposon 10, association, tetracycline, antibiotic resistance 9073.
 host systems, *Cellulomonas fimi* cellulase genes, transformation, gene expression 6018.
 hydrogen peroxide antibacterial activity mechanisms 4007.
 4-hydroxy-2-oxoglutarate aldolase, phosphoric acid inactivation, dimerization 1789.
 hypothiocyanite-H₂O₂ peroxide, bactericidal activity, cytotoxicity 6445.
 identification, enterotoxins production association, hybridization analysis 1934.
 identification, indole test, cost-benefit analysis 6787.
 identification methodology, enterotoxins production association 1088.
 immobilization, use, penicillin amidase, polymers substrates 778.
 immobilized cells, penicillin acylase activity 71.
 immobilized cells, protein biosynthesis bioreactors 2.
 immobilized cells, radiation polymerization, antibodies adsorption 5896.
 immobilized cells, tryptophan synthase, L-tryptophan production 6.
 immobilized cells, 7-aminodesacetoxy-cephalosporin acid production 506.
 in vitro antibiotic sensitivity testing, nosocomial environment clinical isolates 6502.
 inactivation, disinfection, hydrostatic pressure, temperature effects on 5886.
 inactivation, sunlight, sea water 2402.
 incidence, identification, milk, milk products 8708.
 indicator species, survival, marine environment 2395.
 indicator species, wastewater treatment 2342.
 inhibition, growth, role Maillard reaction products 7357.
 injuries, antibiotics sensitivity, cell surface hydrophobicity 2241.
 interferon production, genetic control, lac promoter, tryptophan promoter 3424.
 intestinal microflora, man, amoxicillin, cephradine, antibiotic resistance 6419.
 isocitrate dehydrogenase isoenzymes, purification, characterization 7712.
 isocitrate dehydrogenase kinase, isocitrate dehydrogenase phosphatase activity, ATP role, relationship, isocitrate dehydrogenase regulation 7711.
 isocitrate dehydrogenase kinase, isocitrate dehydrogenase phosphatase, purification, characterization 7715.
 isolation, chickens, antibiotic resistance, tetracycline, chloramphenicol, rifampicin, amoxicillin 3052.
 isolation, identification, methylumbelliferyl- β -D-glucuronide media 5050.
 isolation, water pollution, Brazil 4950.
 β -lactamase, carbanemides, derivatives, inactivation 4862.
 β -lactamase, interaction oxyimino-cephalosporins, structure-activity relationships 6832.
 lipic acid fractions, enzyme-linked immunosorbent assay, thin-layer chromatography 504.
 lipopolysaccharides characterization, electrophoresis, immunoassays 6058.
 lipopolysaccharides, Limulus lysate test, pyrogens tests, association heat treatments 227.
 media (selective) 9300.
 membranes filtration, recovery 9285.
 membrane filtration, separation techniques, homogenates, methodology 8473.
 membrane permeability mutants, gene mapping, relationship susceptibility, antibiotics, antibacterial activity 4794.
 metals resistance, methodology, drug sensitivity testing 3017.
 methionine adenosyltransferase, adenosylmethionine decarboxylase, purification, characterization, review 8569.
 methionyl-tRNA synthetase, amino acid sequence homology, tyrosyl-tRNA synthetase, *Bacillus stearothermophilus* 2621.
 metronidazole, antibacterial activity, DNA damage 6449.
 metronidazole, metronidazole, reduction effects on cytotoxicity 6451.
 mixed culture, use cDNA gene expression analysis 757.
 mixed culture, antibacterial activity, adreanin, cefotaxime 9182.
 mixed culture, methanogenic bacteria, immobilized cells, methanogenesis, sucrose conversion 2182.
 mutagenicity testing, genotoxicity testing 9306.
 mutagenicity testing, role arginine, NAD, valine genes 6775.
 mutants, membrane potential, protons, ATP stoichiometry, N.M.R. 8531.
 mutants, ribitol dehydrogenase biosynthesis, chemostats 6821.
 netilmicin sensitivity 6401.
 nitrate reductase, molybdenum sites 8554.
 nitrofurantoin, derivatives, antibacterial activity 9092.
 nitrogen containing aromatic compounds, biodegradation 1005.
 nocardin A, effects on, morphology, scanning electron microscopy 9216.
 nodules formation, gene expression, nod gene, T1 plasmid vectors 6366.
 norfloxacin disc-diffusion test, bacteria, standardization 3047.
 norfloxacin drug sensitivity testing 9095.
 nucleoside-diphosphate kinase, purification, quaternary structure, mechanism 7700.
 ornithine decarboxylase inhibitor, purification, characterization 2588.
 outer membranes, antibacterial activity, polymyxin B derivatives, complement bacterial activity 5784.
 outer membranes, glycomycin effects on, resistant mutant formation 6556.
 oxoglutarate dehydrogenase (lipamide)- β -dihydroipomide succinyltransferase- β -dihydroipomide dehydrogenase multienzyme complexes, mechanisms, kinetics 7659.
 oxoglutarate dehydrogenase (lipamide)- β -dihydroipomide succinyltransferase- β -dihydroipomide dehydrogenase multienzyme complexes, thioctic acid localization, electron microscopy 7702.
 pathogens, public health, sewage sludge, land disposal 2367.
 pathogens reduction, solar radiation, irrigation water 9249.
 penicillin amidase extraction methodology 893.
 penicillin-binding protein, binding, aminobenzyloxy-penicillin apalacillin, characterization 7432.
 penicillin-binding protein, electrophoresis 3441.
 penicillium amidase, purification, characterization, immobilization 3512.
 peptides analogs antibacterial activity, uptake 2210.
 peptidoglycans biosynthesis, peptidoglycan endopeptidase, assays 3538.
 pepidyl transferase, antibacterial activity, sparsomycin analogs 4740.
 peritonitis, disease control, U.V. radiation, decontamination, dialysis, man 6718.
 phase λ DNA hybrids, environmental factors mutagenicity testing 3330.
 phases, cryopreservation, inactivation factors 1550.
 phases, plaque assay, methodology, detection, water 2403.
 phenylalanyl-tRNA synthetase, purification, characterization, electrophoresis 5995.

Escherichia coli, (continued)

- phosphoenolpyruvate carboxylase activity, phosphoenolpyruvate analogs inhibition 3489.
 phosphoenolpyruvate carboxylase, purification, methodology 5978.
 3-phosphohistidine 1-carboxyvinyltransferase, purification 7714.
 pili, antigenic determinants, synthetic peptides, structure-activity relationships, antigen-antibody interactions, vaccines 6657.
 pili, identification, monoclonal antibodies, enzyme-linked immunosorbent assay 5067.
 pili proteins, subunit structure, purification, characterization, hemagglutination 4252.
 plant extracts, *Citrus* *colocynthis*, *Cochlosorus depressus*, *Fagonia cretica*, *Lycium barbarum*, antimicrobial activity 8339.
 plasmid ColN, colicin N biosynthesis, genetic analysis 4802.
 plasmid pEAP2, gene expression, *Bacillus* β -lactamase 894.
 plasmid pKMR, antibiotic resistance 4699.
 plasmid pMG110 elimination, novobiocin role 5797.
 plasmid RP4, tetracycline, antibiotic resistance, continuous culture 7351.
 plasmids, DNA, isolation, gel chromatography 3539.
 plasmids, DNA, purification methodology 4194.
 plasmids, DNA purification methodology 7598.
 plasmids, gene expression, colonization factors, enterotoxins production 1935.
 plasmids, gene mapping, aminocyclitol phosphotransferase, antibiotic resistance, hygromycin B 427.
 plasmids heterogeneity, flow cytometry 862.
 plasmids heterogeneity, flow cytometry 1572.
 plasmids, R factors, antibiotic resistance, relationship antibiotics, feeds 4003.
 polyacrylamide immobilization, effects on morphology, DNA biosynthesis 1614.
 polyamines biosynthesis regulation, role, histone H2B, DNA-binding protein 2655.
 polymyxin B, sensitization, valinomycin, antibiotic A23187, antibacterial activity 7453.
 polyribonucleotide nucleotidyltransferase activity, measuring techniques, thin-layer chromatography 1599.
 proline production 3408.
 proteins, concentration, purification, absorption, silica, methodology 7668.
 proteins production optimization, genetic engineering 3458.
 pseudomonas aeruginosa, ammonium fumarate conversion, L-alanine 7.
 pyruvate dehydrogenase (lipoprotein) dihydropyrimidine acetyltransferase dihydropyrimidine dehydrogenase complex activity, histidine residues role, p-[(bromocetyl)-amino]phenyl arsenoxide inhibition 3522.
 [pyruvate dehydrogenase (lipoprotein)] kinase active sites activity, bromopyruvic acid inhibition 2623.
 radnuclease, detection, enterotoxins, production 3272.
 recBC protein, deoxyribonuclease, reconstitution 1775.
 recovery, antibacterial activity, polyhexamethylene biguanides 9265.
 recovery, laundry, methodology 5859.
 removal, inactivation, role, aluminum sulfate treatment, eutrophic environments, lakes 9252.
 resistance, chlorine, disinfection 9041.
 resistant mutant, gentamicin, neomycin, nitrofurantoin cross-resistance, genetic analysis 9065.
 ribitol dehydrogenase production 3505.
 ribonuclease E, purification, characterization 2569.
 ribonucleoside-diphosphate reductase interaction 2'-azido-2'-deoxynucleotides, radicals 8556.
 ribosomal protein S1, repeated sequence, role, translation, poly(U), poly(A) 4258.
 ribosomal proteins purification, high-performance liquid chromatography methodology 7660.
 RNA polymerase (DNA-dependent), rifandin effects on 8358.
 serotyping, enterotoxins detection methodology, *Vero* cells 3345.
 serum bactericidal activity, aztreonam, \pm cefoperazone, \pm amikacin 8344.
Shigella dysenteriae like toxins, purification, characterization 6211.
 sirohem containing proteins, nitrate reductase, assays, peroxidase staining, immunodiffusion 8559.
 S-nitroso-6-phosphoglutamate dehydrogenase, mannitol-1-phosphate dehydrogenase, purification, characterization 8555.
 streptomycin intracellular killing 4849.
 succinyl-CoA synthetase (ADP-forming), 5'-p-fluorosulfonylbenzoyl adenosine modification, association ATP, ADP binding sites 1758.
 survival, slurries, wastewater treatment, nitrate-binding bacteria 6700.
 tetrahydrofolate dehydrogenase, purification, plasmid pTP 6-10, cloning vectors, transformation 99.
 thioredoxin, protein structure, tertiary structure, homology, glutaredoxin 7666.
 transformation, malic acid assimilation, malolactic fermentation, *Leuconostoc oenos* 3627.
 transformation, plasmids, drug resistance 7337.
 transformation, yeasts cytochrome c CYP1 gene 819.
 transposon γ containing cloning vectors transposition 758.
 transposon Tn10, repressors, binding, sites, genetic control, tetracycline, antibiotic resistance 1315.
 transposon Tn5, mediation, streptomycin, antibiotic resistance 7336.
 trimethoprim drug resistance, tetrahydrofolate dehydrogenase role 6429.
 2,4,6-trinitrotoluene biodegradation 4432.
 U.V. radiation disinfection, kinetics models, water 568.
 urinary tract clinical isolates, drug resistance, trimethoprim, sulfamethoxazole, plasmids 2204.
 urinary tract clinical isolates, identification, antibiotic sensitivity testing, methodology 3315.
 vaccines, production, characterization 541.
 wild type, enveloped mutants, sensitivity, association, antibiotics, preservatives, cell membranes role 3080.
 xylose isomerase, gene expression, *Saccharomyces cerevisiae* promoters 5157.
 xylose isomerase genes, xylulokinase genes, cloning, use, ethanol, fermentation 963.

Essential oils

Ageratum houstonianum, toxicity, *Microsporium gypseum* 5505.

Cimicifuga racemosa, antifungal activity, in vitro 9105.

plants, effects on, yeasts, association, heat shock 3064.

Salvia officinalis, spices, antibacterial activity 8719.

spices, antifungal activity, growth, aflatoxins production, *Aspergillus parasiticus* 7891.

spices, antifungal activity, yeasts 8318.

Ester hydrazides, antimicrobial activity 9142.

Esterase

activity, *Leuconostoc cinerea*, detection, role, fermentation, wine aroma 4410.

activity, leukocytes, detection, bacteriuria 731.

electrophoresis, isoelectric focusing, *Yersinia enterocolitica*, *Yersinia pseudotuberculosis* subsp. *pseudotuberculosis* 6856.

Fusarium solani f.sp. *pisi*, infection, depolymerization, suberin, tubers, *Solanum tuberosum* 8852.

multiple forms, purification, characterization, *Aspergillus niger* 1784.

multiple forms, thermal stability, substrate specificity, *Aspergillus niger* 1786.

organic compounds synthesis 4385.

Esterification, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

fats, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.

nanol, (continued)

fermentation, use, *Escherichia coli*, xylulose isomerase, xylulokinase, genes, cloning 863.

fermentation, use, grain, vapors phase separation techniques 1875.

fermentation, whey, *Kluyveromyces fragilis*, immobilized cells 2684.

fermentation, wine, brandy, yeasts, lactic acid bacteria 5279.

fermentation, yeasts 6127.

fermentation, yeasts immobilized cells bioreactors, molasses feeds contamination 6122.

fermentation, *Zymomonas mobilis* 2694.

intracellular levels, factors affecting, *Saccharomyces cerevisiae* 989.

quercus fermentation, bioreactors, *Kluyveromyces fragilis* 3590.

levels, association defoliation, colonization, *Armillaria mellea*, dieback, *Quercus velutina*, *Quercus alba* 5586.

levels, fermentation, sensors, computer applications 3635.

production, association, chromosome number, *Pachysolen tannophilus* 147.

levels, measuring techniques, gas chromatography, fermentation, *Saccharomyces cerevisiae* 3581.

ignocelluloses, cell walls, steam disruption, cellulase hydrolysis 5278.

metabolism, polysaccharides, extracellular polymers production, *Agrobacterium radiobacter* 5656.

microorganism biosynthesis, books 2541.

monitoring, sensors, fermentation, *Saccharomyces cerevisiae* 4419.

production, xylulose conversion, *Pachysolen tannophilus*, *Candida tropicalis* 3657.

production, arcinone orange, mutagenesis, *Zymomonas mobilis* 5267.

production, ammonium stimulation, fermentation, *Saccharomyces cerevisiae* 3626.

production, animal wastes conversion, digestion (anaerobic) 5275.

production, biotechnology, conferences, books 4248.

production, association, com-: whey fermentation 982.

production, association, *Kluyveromyces fragilis* biomass, whey+ molasses substrates, aerobic conditions 1069.

production, association, potassium, *Saccharomyces cerevisiae* 3613.

production, batch culture, immobilized cells, yeasts 3619.

production, batch culture, noise filters, computer applications, growth, yeasts 3630.

production, bioreactors, immobilized cells, *Zymomonas mobilis* 3618.

production, bioreactors, *Zymomonas mobilis* 5293.

production, biotechnology, bacteria, fungi, yeasts, books 4234.

production, biotechnology, books, conferences 5943.

production, biotechnology, conferences, books 4248.

production, biotechnology, thermophilic bacteria enzymes, *Bacillus stearothermophilus* 7794.

production, *Candida utilis*, anaerobic conditions effects on, xylulose fermentation 991.

production, carbohydrates conversion, reviews, microorganisms 5272.

production, carbohydrates utilization, *Thermoanaerobacter ethanolicus* 5283.

production, cellobiose conversion, immobilized cells, + immobilized enzymes, *Saccharomyces cerevisiae* + β -D-glucosidase 8664.

production, cellulose fermentation, *Clostridium* 6150.

production, cellulose fermentation, *Clostridium acetobutylicum* 5111.

production, cellulose fermentation, *Clostridium thermocellum* 5969.

production, *Clostridium saccharolyticum* pyruvic acid deficient mutant 152.

production, com fermentation, *Aspergillus awamori*, *Aspergillus niger* 5290.

production, crop residues, cellulolytic microorganisms 3637.

production, crop residues fermentation, immobilized cells, *Saccharomyces* 3641.

production, crop residues fermentation, pretreatment 5307.

production, crop residues, lignocelluloses fermentation, *Saccharomyces cerevisiae* 4592.

production, D-xylulose fermentation, hemicelluloses hydrolyses, yeasts 6935.

production, D-xylulose conversion, feedback inhibition, *Schizosaccharomyces pombe* 3644.

production, D-xylulose conversion, *Saccharomyces cerevisiae* 3643.

production, deficient mutant, alcohol dehydrogenase, *Saccharomyces cerevisiae* 6122.

production, effects on growth, *Zymomonas mobilis* 5282.

production, fermentation, bacteria 6937.

production, fermentation, bioreactors, optimization, mathematical models, *Saccharomyces cerevisiae* 6138.

production, fermentation, cellobiose, glucose, xylulose, mixtures, mixed culture, *Clostridium saccharolyticum*, *Zymomonas anaerobia* 8661.

production, fermentation, cellulose, yeasts, *Fusarium*, *Mucor*, reviews 6107.

production, fermentation, cellulose, yeasts, methodology 7806.

production, fermentation, continuous culture, *Clostridium thermosaccharolyticum* 3578.

production, fermentation, continuous culture, mathematical models 6137.

production, fermentation, crop residues, *Malus* 3623.

production, fermentation, high-gravity wort, nutrient requirements, *Saccharomyces uvarum* 8667.

production, fermentation, lactic acid bacteria 5240.

production, fermentation, lignocelluloses, *Candida acidithiophila* 3617.

production, fermentation, lignocelluloses, *Clostridium thermocellum*, *Clostridium thermosaccharolyticum*, *Clostridium thermohydrosulfuricum* 4419.

production, fermentation, methodology, *Zymomonas mobilis*, reviews 6109.

production, fermentation, microorganisms, reviews 6110.

production, fermentation, monitoring, computer applications, *Saccharomyces cerevisiae* 5966.

production, fermentation, monitoring, oxygen consumption, carbon dioxide, computer applications, *Saccharomyces cerevisiae* 6142.

production, fermentation, optimization, mathematical models, *Saccharomyces cerevisiae* 5964.

production, fermentation optimization, sodium azide effects on electron transport cytochrome c oxidase, *Saccharomyces cerevisiae* 3624.

production, fermentation, optimization, yeasts 8660.

production, fermentation, peat hydrolysates, yeasts 6930.

production, fermentation, *Saccharomyces cerevisiae*, *Kluyveromyces fragilis*, tubers, *Helianthus tuberosus* 5297.

production, fermentation, *Saccharomyces cerevisiae*, *Zymomonas mobilis*, genetic engineering, reviews 6112.

production, fermentation, South America, reviews 6108.

production, fermentation, whey, lactose, continuous culture, catabolite repression resistance mutants, *Saccharomyces cerevisiae* 8668.

production, fermenters, continuous culture, *Saccharomyces cerevisiae* 9811.

production, fermenters, growth conditions, feedback inhibition, *Candida utilis* 3629.

production, flocculation gene transfer, *Saccharomyces cerevisiae* 4406.

production, flocculation, yeasts 2552.

Ethanol, (continued)

production, fructose, concentration, effects on, *Zymomonas mobilis* 996.

production, fructose fermentation, *Zymomonas mobilis* 6929.

production, glucose fermentation, batch culture, *Zymomonas mobilis* 3602.

production, glucose fermentation, carrageenans immobilized cells, *Zymomonas mobilis* 5300.

production, glucose fermentation, factors affecting, *Saccharomyces carlsbergensis* 7815.

production, glucose fermentation, fermenters, immobilized cells, *Saccharomyces cerevisiae* 3606.

production, glucose fermentation, *Saccharomyces cerevisiae* 8655.

production, *Helianthus tuberosus* fermentation, immobilized cells, *Kluyveromyces marxianus* 3640.

production, hemicellulose conversion, *Pachysolen tannophilus* 3620.

production, hemicelluloses fermentation, *Thermoanaerobacter ethanolicus* 5284.

production, immobilized cells, bioreactors 3634.

production, immobilized cells, *Kluyveromyces marxianus*, *Saccharomyces cerevisiae*, whey, lactose fermentation 1864.

production, immobilized cells, *Saccharomyces formosensis* 5291.

production, immobilized cells, water effects on, *Saccharomyces cerevisiae* 3659.

production, immobilized cells, yeasts 3639.

production, inulin fermentation, *Kluyveromyces marxianus*, stalks, *Helianthus tuberosus* 5298.

production, *Kluyveromyces marxianus*, whey permeate fermentation 8669.

production, lactose fermentation, *Kluyveromyces fragilis* 5289.

production, lignocelluloses 3600.

production, lignocelluloses fermentation, cellulase+hydrogen peroxide 5303.

production, lignocelluloses hydrolysis, cellulase activity, *Trichoderma reesei*, *Trichoderma harzianum*, *Klebsiella pneumoniae*, *Saccharomyces cerevisiae*, *Zymomonas mobilis* 5274.

production, malic acid conversion, activity, malate dehydrogenase, alcohol dehydrogenase, *Saccharomyces cerevisiae* 4409.

production, measuring techniques, use, gas chromatography, computer applications 160.

production, methodology, reviews 6111.

production, microorganisms, contamination, molasses, continuous culture, immobilized cells, yeasts 7799.

production, microorganisms, fermentation, characterization, books, conferences 8500.

production, molasses fermentation, immobilized cells, *Saccharomyces formosensis* 168.

production, molasses fermentation, immobilized cells, *Saccharomyces cerevisiae* 8659.

production, molasses fermentation, *Saccharomyces cerevisiae*, immobilized cells 167.

production, musts, oxygen effects on, yeasts 6122.

production, oscillations, fermentation, continuous culture, mathematical models, *Saccharomyces cerevisiae* 6119.

production, oxygen effects on, *Saccharomyces cerevisiae* 3603.

production, *Pachysolen tannophilus* 3621.

production, petrochemicals, biomass 3372.

production, potassium nutrient requirements, single-cell protein production, *Torulopsis ethanolicola* 3409.

production, relationship, isolation methodology, *Zymomonas mobilis* 4415.

production, *Saccharomyces cerevisiae*, measuring techniques, gases sensors electrodes 1868.

production, *Saccharomyces formosensis*, immobilization, growth 1866.

production, *Saccharomyces uvarum*, immobilized cells, fermentation, juices, *Sorghum bicolor* 8658.

production, *Saccharomyces uvarum*, mutants, fermentation 7802.

production, salts, inhibition 4412.

production, *Sorghum* juices fermentation, Yeasts 5302.

production, sporulation relationship, *Clostridium acetobutylicum* 7784.

production, starch fermentation 8682.

production, sucrose fermentation, monitoring, computer applications, immobilized cells, *Saccharomyces cerevisiae* 6143.

production, sugars fermentation, cost-benefit analysis, tubers, *Beta vulgaris* 8656.

production, sugars fermentation, immobilized cells, *Saccharomyces cerevisiae* 5130.

production, sugars fermentation, Maillard reaction, *Saccharomyces cerevisiae* 8662.

production, sugars fermentation, starch, amylolytic enzymes pretreatment, *Zymomonas mobilis* 8663.

production, sugars fermentation, wood hydrolysis, enzymes, acids 7814.

production, temperature effects on, *Kluyveromyces marxianus* 3588.

production, viability, yeasts 3632.

production, whey fermentation, continuous culture, *Kluyveromyces fragilis* 3604.

production, wort fermentation, α -D-glucosidase activity, *Saccharomyces carlsbergensis* 5287.

production, xylulose conversion, *Pachysolen tannophilus* 3595.

production, xylulose fermentation, fungi, *Fusarium oxysporum* 9344.

production, xylulose fermentation, *Pachysolen tannophilus* 171.

production, xylulose fermentation, *Pachysolen tannophilus* 3596.

production, xylulose fermentation, *Pachysolen tannophilus* 5281.

production, xylulose fermentation, *Pachysolen tannophilus* comparison *Pichia stipitis* 6136.

production, xylulose fermentation, *Pachysolen tannophilus*, trifluoroacetic acid hydrolysis, hemicelluloses, straw, *Triticum aestivum* 8657.

production, xylulose fermentation, *Schizosaccharomyces pombe* 5294.

production, xylulose fermentation, yeasts 5285.

production, yeasts, capta effects on, *Zea mays* 3645.

production, yeasts, corn, γ radiation effects on 151.

production, *Zymomonas mobilis* 3591.

production, *Zymomonas mobilis* 3638.

production, *Zymomonas mobilis* 7795.

production, *Zymomonas mobilis*, calcium+algin immobilized cells 2675.

production, *Zymomonas mobilis*, carbon sources, effects on, growth, morphology 3615.

production, *Zymomonas mobilis*, fructose substrates, factors affecting, kinetics 148.

production, *Zymomonas mobilis*, *Saccharomyces cerevisiae*, comparison 986.

production, *Zymomonas mobilis*, sucrose fermentation, reactors 153.

solubilization, n-alkanes, metabolism, *Candida lipolytica* 1307.

sugars fermentation, cellulose hydrolysis, cellulolytic enzymes, cost-benefit analysis, *Trichoderma reesei* 5299.

Ethanol, (continued)

tolerance, *Clostridium thermohydrosulfuricum*, factor affecting fermentation physiology 6135.
tolerance, relationship heat shock proteins biosynthesis, *Saccharomyces cerevisiae* 988.
use, separation techniques, *Citrus exocortis* viroid infected *Gynura aurantiaca* RNA, DNA 3248.
utilization, association alcohol dehydrogenase, *Escherichia coli* 5972.

Ethanolamine ammonia-lyase,

induction, purification, characterization, *Escherichia coli* 4280.

Ethidium bromide,

fluorescence staining, bacteria, blood samples 5044.

Ethiopia,

Ascochyta blight, *Cicer arietinum* 3790.
Hodeum vulgaris, loose smut disease resistance 5503.
hospitals, blood culture, clinical isolates, bacteria, antibiotic sensitivity testing 7400.

Ethiropop,

fumigation, effects on soil microorganisms, crop fields 5681.

3-(4-Ethoxy-3-methoxyphenyl)-2-(4-methoxyphenyl)propionic acid,

biodegradation, association, lignin, metabolism, *Phanerochaete chrysosporium* 3662.

Ethyl(R)-(-)-3-hydroxy-2-methylpropanoate,

production, ethyl α -methylpropanoate conversion, yeasts 7768.

Ethyl α -formylpropanoate,

conversion, ethyl(R)-(-)-3-hydroxy-2-methylpropanoate production, yeasts 7768.

Ethyl acetate,

production, ethanol conversion, *Candida utilis* 8516.

Ethyl α -exobutanoate,

reduction, formation, 3-hydroxybutanoate, *Geotrichum candidum*, *Aspergillus niger* 8631.

1-Ethyl-3-n-alkylthiomethyl-imidazole chloride,

antifungal activity, antibacterial activity 9132.

6-Ethyl-6,9-dihydro-9-oxopyrazolo[3,4-f]quinoline-5-carboxylic acid,

synthesis, structure, antibacterial activity 1331.

Ethylbenzene,

biodegradation, plasmids, *Pseudomonas fluorescens* 4425.

Ethylene,

biosynthesis, hypersensitive response, infection, tobacco mosaic virus, tobacco necrosis virus, *Nicotiana tabacum* 2060.

biosynthesis, hypersensitive response, tobacco mosaic virus, temperature, light effects on, leaves, *Nicotiana tabacum* 2061.

effects on survival, *Coniferales* seedlings, mycorrhizas, cold storage 5581.

induction leaves chlorosis, *Poa pratensis* leafspot 8797.

production, ascocarps, forests, *Elaphomyces*, Sweden 351.

production, association, carbon monoxide, inhibition, nitrogenase, soil microorganisms, soil 6357.

production, *Capicium annuum*, spot, *Xanthomonas campestris* pv. *vesicatoria* 4546.

production, fruits, *Rhizopus stolonifer* infection effects on, *Lycopersicon esculentum* 2011.

production, microorganisms 8265.

production, *Penicillium digitatum*, use, *Citrus* wastes 973.

treatment, *Penicillium italicum* post-harvest decay, oranges susceptibility 3653.

Ethylene oxide,

resistance, *Bacillus subtilis* var. *niger* spores, sterilization cycles 4035.

sterilization, medical equipment 1361.

sterilization, medical equipment 8341.

Ethylmercuric chloride,

seed treatments, seed-borne diseases, *Pinus roxburghii* 8176.

Ethylmethanesulfonate,

mutagenesis, methionine over production, single-cell protein, yeasts 5115.

mutagenesis, *Thermomonas curvata*, catabolite repression resistant mutant, cellulase biosynthesis 1746.

Etiahi behri,

biological control, pest control, *Bacillus thuringiensis* 2644.

Eubacterium,

16 α -hydroxyprogesterone dehydroxylase, isolation, characterization 4310.

septicemia detection, liquid culture methodology, man 2466.

Eubacterium lentum,

bile acids, inoleic acid, metabolism 1888.

Eubacterium limosum,

rRNA, comparison methodology 2513.

Eubacterium tenue,

rRNA, comparison methodology 2513.

Eucalyptus,

ectomycorrhizas formation 6323.

greenhouses, incidence, fungi plant disease 8942.

heartwood, bacteria 364.

hybrids, infection, *Alternaria tenuis*, *Cladosporium herbarium*, symptoms, new records 2118.

leafspot, *Autographina eucalypti* 5612.

leaves, mycoplasma-like organisms infection 4617.

Phytophthora cinnamomi infection, roots, water relations 5605.

rust, *Puccinia psidii*, disease resistance 5594.

Eucalyptus calophylla,

roots, temperature, effects on, *Phytophthora cinnamomi*, infection 3912.

Eucalyptus citriflora,

Cladosporium herbarium infection, symptoms, new records 2118.

Eucalyptus globulus subsp. bicostata,

electrical impedance, dieback, *Armillaria luteobubalina* 2117.

Eucalyptus grandis,

seedlings, stem canker, *Cylindrocadium scoparium*, disease control 6324.

Eucalyptus maculata,

Phytophthora cinnamomi infection, factors affecting pathogenesis 2119.

Eucalyptus marginata,

bark, water content, relationship *Phytophthora cinnamomi* infection 358.

canker, etiology, pathology 370.

dieback, disease control, *Phytophthora cinnamomi* 8170.

phloem, *Phytophthora cinnamomi* infection, stems lesions development 3842.

rhizosphere, actinomycetes, antagonism, *Laccaria laccata*, *Pythium*, *Phytophthora* 2099.

roots, temperature, effects on, *Phytophthora cinnamomi*, infection 3912.

Eucalyptus obliqua,

electrical impedance, dieback, *Armillaria luteobubalina* 2117.

forests, litter, soil, acetylene reduction, nitrogen-fixing bacteria 8937.

Eucalyptus pilularis,

Phytophthora cinnamomi infection, factors affecting pathogenesis 2119.

Eucalyptus sieberi,

root rot, *Phytophthora cinnamomi*, soil types 5584.

Eucalyptus tetradonta,

stands, *Phytophthora cinnamomi*, dieback 359.

Eudistoma olivaceum,

eudistomins isolates, antiviral activity 9122.

eudistomins isolates, antiviral activity 9123.

Eudistomins,

antiviral activity, *Eudistoma olivaceum* isolates 9122.

antiviral activity, *Eudistoma olivaceum* isolates 9123.

Eudypates chrysolophus,

colonies, nitrogen cycle 9003.

Eugenol,

biodegradation pathway, *Pseudomonas* 4421.

Eumecella cavolini,

vidarabine isolates, antiviral activity 9128.

Eupatorium odoratum,

daylength, effects on infection, *Glomus macrocarpum* 8977.

growth, soil temperature, oxygen, inoculation, vesicular-arbuscular mycorrhizas 7256.

light intensity, effects on infection, *Glomus macrocarpum* 8975.

soil aeration, carbon dioxide effects on symbiosis, *Glomus macrocarpum* vesicular-arbuscular mycorrhizas, nutrient uptake, soil aeration effects on 9122.

Eupenicillium,

ascospores, seasonal variations, soil horizons, forest floor 5540.

Euphorbia,

latent infection, *Euphorbia lathyris*, weeds, USA, Arizona 8044.

Euphorbia lathyris,

Macrophomina phaseolina latent infection, sclerotia soil levels, USA, Arizona 8044.

Euphorbia virus,

infection, effects on, *Datura stramonium*, ultrastructure 3817.

Europe,

methanogenesis, digestion (anaerobic), reactors design, surveys, books 3662.

Eurotium amstelodami,

spoilage, coconut 5344.

spoilage, water content effects on, mathematical models, apples 8877.

Eurotium chevalieri,

spoilage, coconut 5344.

Eurotium herbarium,

spoilage, coconut 5344.

Euscelidius variegatus,

vectors, transmission, *Spiroplasma stunt*, *Sinapis alba*, *Pisum sativum*, *R. sativus*, *Spinacia oleracea* 8030.

Eutrophic environments,

lakes, aluminum sulfate treatment, role, removal, inactivation, fecal coliforms 9252.

Eutypa armeniacae,

dieback, *Vitis vinifera*, *Prunus armeniaca*, spores dispersal 1152.

isolation, *Malus domestica*, USA, Washington, in vitro, pathogenicity, cultural characteristics 2005.

wound infection, biological control, antagonism, *Fusarium lateritium* conidia 6307.

Eutypella parasitica,

canker, association, defects, forest products, *Acer saccharum* 8180.

canker, pathology, economic importance, *Acer saccharum*, Canada 8179.

Evaporation,

composting, temperature, oxygenation, ventilation 4085.

Evapotranspiration,

blight, effects on, *Citrus paradisi* 5439.

Evolution,

catabolism pathway, bacteria, reviews 7821.

nitrogen fixation, bacteria, biosphere, paleoenvironments 2171.

population genetics, host-pathogen interactions, plant diseases 1106.

selection, antibiotic resistance mechanisms, bacteria, reviews 9056.

Excretion,

Larus ribundus, *Salmonella*, relationship, *Salmonella* contamination sea sludge, feeding, serotyping 9245.

Exo-1,4- α -D-glucosidase,

amino acid sequence, *Aspergillus niger* 5980.

amino acid sequence, *Aspergillus niger* 7724.

Aspergillus awamori, genes, cloning 3498.

Aspergillus niger, immobilized enzymes, starch processing 111.

biosynthesis, *Aspergillus oryzae*, carbon sources, nitrogen sources 4332.

biosynthesis, *Aureobasidium pullulans* 8603.

fungi, immobilized enzymes systems, corn syrup production 208.

hydrolysis, maltose, isomaltose, maltotriose, *Aspergillus niger* 3473.

immobilization, use textiles, hydrophobicity 5142.

immobilized enzymes, kinetics, *Aspergillus niger* 1771.

immobilized enzymes, kinetics, stability, *Aspergillus niger* 78.

immobilized enzymes, kinetics starch, maltose hydrolysis, *Rhizopus dele*

immobilized enzymes, starch hydrolysis 3535.

kinetics, glucose conversion, formation, isomaltose, exo-1,4- α -D-glucosidase 3464.

Rhizopus niveus, *Aspergillus niger* 3464.

production, genetic analysis, *Saccharomyces cerevisiae*, *Saccharomyces* 5155.

production, mutants selection, catabolite repression, *Aspergillus niger* 51.

production, optimization, carbohydrates hydrolysis, fungi 5193.

production, *Rhizopus thalidensis*, immobilized cells, bioreactors, mathematical models 7729.

production, screening, fungi 8544.

purification, kinetics, *Aspergillus niger* 934.

Rhizopus, immobilization, use, poly(tetrafluoroethylene) membranes + Co 39.

Rhizopus niveus, immobilized enzymes, maltose, starch hydrolysis, reaction, substrate specificity, glycoproteins, purification, characterization, *Aspergillus* 3500.

subunits, binding specificity, *Aspergillus* satelli 8663.

subunits, purification, characteristics, *Saccharomyces diastaticus* 8570.

tryptophan residues, role activity, *Aspergillus niger* 7726.

Exo-1,4- β -D-xylosidase,

activity, substrate specificity, monosaccharides, pH, temperature effects 7725.

Aspergillus niger 7725,

biosynthesis, characterization, *Neurospora crassa* 6013.

- α-1,4-β-D-xylosidase, (continued)**
 characterization, *Aspergillus niger* 4320.
 enzymatic activity production, *Cellulomonas* growth, carbohydrates substrates 32.
 glycosylation, p-nitrophenyl-β-D-glucopyranoside, p-nitrophenyl-β-D-xylopyranoside, *Aspergillus niger* 4349.
 hydrolysis, glycosylation, *Aspergillus niger* 7752.
 purification, characterization, *Aspergillus niger* 6857.
α-1,2,3-α-D-mannosidase,
 production, *Volvariella volvacea* 6873.
α-cellobiohydrolase,
 amino acid sequence, homology, cellulase, *Trichoderma reesei* 3509.
 amino acid sequence, *Trichoderma reesei* 3510.
 excretion, carbon sources, cellobiose, cellulose effects on, *Schizophyllum commune* 6874.
 Fusetanin, purification, characterization 102.
 genes, introns excision, methodology, clones, *Trichoderma reesei* 8568.
 isoenzymes, purification, affinity chromatography, *Trichoderma reesei* 6867.
α-maltotetrahydrolase,
 isoenzymes, purification, kinetics, *Pseudomonas stutzeri* 1792.
α-oxoacyl-CoA synthetase III,
 use site-directed mutagenesis methodology 738.
Cophila jensei,
 pathogens, isolation, feeds, storage buildings 582.
Exotoxin,
Bacillus thuringiensis, biological control, *Leptinotarsa decemlineata*, mutagenicity, Ames test 125.
Bacillus thuringiensis subsp.berliner, clays formulations, pest control, *Pulicidae* 4398.
Kotoxin A,
 hybrids, biotechnology, genetic engineering, *Pseudomonas aeruginosa* 7121.
Staphylococcus aureus, electrosynthesis assays 4480.
Kotoxin B,
Staphylococcus aureus, electrosynthesis assays 4480.
Loxins,
Bacillus thuringiensis, biological control, bioassays, toxicity, larvae, *Hypera postica* 8641.
Bacillus thuringiensis, mortality, larvae, *Achaea janata* 1852.
 characterization, *Vibrio* 5391.
 high-performance liquid chromatography, assays, insecticides, biological control, *Bacillus thuringiensis* 2766.
 purification, characterization, *Staphylococcus aureus* 4482.
 toxic shock syndrome, biosynthesis, inhibition, clindamycin 7116.
Opioles,
 2,4,6-trinitrophenol, hexahydro-1,3,5-trinitro-1,3,5-triazine, biodegradation, composting, soil decontamination 7511.
Opiolesium rostratum,
 leafspot, *Chrysobacterium luteus*, foliar applications, micronutrients, fungicides, effects on 3910.
Opiolesium turcicum,
 saprophytes, survival, soil 2137.
Opiolesium enzymes,
 activity, *Geotrichum candidum*, virulence, plant diseases 7128.
 α-1-arabinofuranosidase, characterization, *Erwinia carotovora* 5133.
Bacillus thuringiensis proteinase, biosynthesis, proteins effects on 1818.
 glucose isomerase, characterization, *Chania* 7742.
 inhibition, propylene phenoxetol, antibacterial activity, *Propionibacterium acnes* 4725.
 mice α-amylose biosynthesis, cloning vectors, gene expression, *Saccharomyces cerevisiae* 5169.
 monophenol monooxygenase, production, *Rhizopus*, *Mucor* 7759.
 oxidase, molds, detection 1799.
 polyamine oxidase, acetylpolymers oxidation, *Penicillium* 932.
 polygalacturonase, purification, *Aspergillus niger* 926.
 production proteinase, ultrastructure, *Streptomyces rimosus*, *Streptomyces* 6862.
 production, *Rhizopus*, *Mucor* 5126.
 proteinase activity, gramicidin D effects on, *Bacillus thuringiensis* 6025.
 proteinase, *Bacillus megaterium*, temperature effects on 4292.
 proteinase, biosynthesis, temperature effects on, *Bacillus licheniformis* 4879.
 proteinase, characterization, *Neurospora crassa* 6885.
 proteinase, cold storage effects on recovery, *Aeromonas hydrophila* 7762.
 proteinase, isolation, characterization, *Staphylococcus aureus* 8608.
 proteinase, *Pseudomonas aeruginosa*, stimulation, whey, casein 1810.
 proteolytic enzymes, production, hydroxyanthraquinone stimulation, *Aspergillus kanagawaensis*, *Aspergillus wentii* 916.
 purification, chromatography, microorganisms 5159.
Streptococcus mutans, role polysaccharides biosynthesis 8616.
 triacylglycerol lipase, food industry, reviews, microorganisms 2800.
 xylose isomerase, characterization, *Chania* 7742.
 xylose isomerase, production, *Chania* 91.
Tracellular polymers,
 activated sludge, extraction methodology, flocculation correlation 1462.
 carbohydrate composition, antifungal activity, *Coriolus* 3471.
Erwinia amylovora, polysaccharides, characterization, infection, tissue culture, *Malus pumila* 1835.
 extraction, activated sludge, methodology 1490.
 gels, carbohydrate composition, polysaccharides, *Pseudomonas elodea* 4369.
 polysaccharides, *Agrobacterium radiobacter*, seed treatments, biological control, λ-lamphage-01, stimulation, seed germination, *Lycopersicon esculentum* 6309.
 polysaccharides, biosynthesis, carbon sources, nitrogen sources effects on, *Cryptococcus laurentii* 5198.
 polysaccharides biosynthesis, *Cryptococcus laurentii* 6054.
 polysaccharides, carbohydrate composition, gums, *Pseudomonas elodea* 4366.
 polysaccharides, Clostridium, antifungal activity, sarcoma, mice 3540.
 polysaccharides, production, ethanol metabolism, *Agrobacterium radiobacter* 6056.
 polysaccharides, *Pseudomonas phaseolicola*, cell adhesion, ultrastructure, cell walls, *Phaseolus vulgaris* 2785.
 polysaccharides, role *Rhizobium meliloti*, infectivity, nodulation, *Medicago sativa* 6372.
 polysaccharides, staining, bacteria 5060.
 production, bacteria flocculation, activated sludge settlement, role, nutrient balance 2332.
Pseudomonas aeruginosa sodium alginate, antibodies, detection, enzyme-linked immunosorbent assay 761.
 fungi contamination contact lenses, man 1527.
Eye, (continued)
 microflora, cefmenoxime antibacterial activity, man 7546.
Eye spot,
 Gramineae, *Pseudocercospora* herpotrichoides spores dispersal, inhibition, cellulose xanthate 8058.
 Gramineae, soil microorganisms, antagonism, *Rhizoctonia*, *Ceratobasidium* 7208.
Pseudocercospora herpotrichoides, carbendazime resistance 5721.
Pseudocercospora herpotrichoides, disease resistance, genes, *Aegilops ventricosa*, transfer, *Triticum aestivum* 8078.
Pseudocercospora herpotrichoides, relationship, *Triticum aestivum* respiration 2795.
Pseudocercospora herpotrichoides, *Triticum aestivum*, factors affecting spore germination 7146.
Pseudocercospora herpotrichoides, *Triticum aestivum*, carbendazim resistance association treatment 8129.
Rhizoctonia cerealis, *Triticum aestivum*, effects on yield 1133.
Eyespot,
Cecropora coffeicola, shading, rainfall, seasonal variations, plantations, *Coffea arabica* 273.
Pseudocercospora herpotrichoides, spores dispersal, rainfall, wind, straw, *Triticum aestivum* 1997.
Fabrics,
 desizing, α-amylose, fungi, bacteria, textile industry 52.
Q factor,
 production, *Gaeumannomyces graminis* var.tritici 8374.
Factor F430,
 N.M.R., structure 6071.
Facultative bacteria,
 β-lactamase production, role, *Bacteroides melanogenicus* protection, penicillin antibacterial activity 5775.
Fagonia cretica,
 plant extracts, antimicrobial activity 8339.
Fagus grandifolia,
 bark phenols, levels, host-pathogen interactions, *Nectria coccinea* var.faginata 8188.
Fagus silvatica,
 wood, decomposition, bacteria 7239.
Fagus sylvatica,
 association, soil, denitrification, bacteria 2991.
 decay fungi, biological control, bacteria, fungi 5589.
 decay fungi, biological control, *Trichoderma viride*, *Bacillus*, field trials 5587.
 forests, litter fall decomposition, British Isles 352.
 fungal flora, association, natural pruning 2105.
 mycorrhizas symbiosis development, ultrastructure 2104.
 pathogenicity, *Armillaria mellea* 353.
Falcarindiol,
Lycopersicon esculentum, characterization, *Verticillium albo-atrum* infection 7200.
Lycopersicon esculentum, characterization, *Verticillium albo-atrum* infection 7200.
Fallow land,
 soil microorganisms, mineralization, nutrient cycles, *Triticum aestivum* 5668.
Fallowing,
 denitrification, agricultural land, *Triticum aestivum* 2988.
Farnesene,
 derivatives, *Myzus persicae*, effects on disease transmission, plant diseases, potato virus Y 5401.
Farnesol dehydrogenase,
 lipomoea batatas, black rot, *Ceratocystis fimbriata*, effects on 7187.
Fats,
 esterification, triacylglycerol lipase immobilized enzymes, *Rhizopus delemar* 67.
Fatty acid composition,
Achromobacter xylosoxidans nosocomial infection isolates, antibiotic sensitivity testing 4789.
 glycolipids, 3-methoxy octadecanoic acid, *Rhodotorula glutinis* 4382.
 lipids, production, *Rhodotorula glutinis* 5217.
 lipids production, yeasts 3583.
 Phytophthora infestans, mycelia, role pathogenicity, *Solanum tuberosum* 2012.
Pleurotus ostreatus, 5336.
Propionibacterium, dairy starters, relationship growth, cold 3699.
Staphylococcus aureus, antibiotic AL-87 resistance association 7313.
 yeasts, gas chromatography 836.
Fatty acid synthetase,
 active sites peptides, amino acid sequence, *Cephalosporium caerulens*, comparison, *Saccharomyces cerevisiae* 8529.
 cerulenin, antibiotic resistance, purification, characterization, *Cephalosporium caerulens*, comparison, *Saccharomyces cerevisiae* 8528.
 purification, *Saccharomyces cerevisiae* 6854.
Fatty acids,
 analysis, bacteria biomass, community structure, *Rhizophora* sediments 8969.
 antibacterial activity, *Mycobacterium* 8298.
Bacillus cereus, concentration methodology 4212.
 biosynthesis, comparison *Brefeldium A* biosynthesis, stereochemistry, *Penicillium brefidanum* 8378.
 biosynthesis, fermentation, milk, dairy starters 7865.
 biosynthesis, *Mycobacterium tuberculosis* extracts 1858.
 bone, synergism, antagonism, gentamicin, bacteriostasis 4052.
 by-products, inhibition, fermentation, wine production, yeasts 5286.
 carbon-13 distribution, *Nococcum graniforme*, *Hebeloma crustuliniforme*, N.M.R. 8857.
 copper salts, disease control, *Pseudomonas syringae* pv.morspunorum, canker, *Prunus cerasus* 344.
 esters, bacteria, biochemical analysis, methodology 3270.
 fluorescence, aflatoxins, analysis, thin-layer chromatography, high-pressure liquid chromatography, grain, *Zea mays* 8726.
 inhibition viability, fermentation, *Saccharomyces cerevisiae* 3625.
 nutrient sources, *Aspergillus aflatoxins* biosynthesis, mycelia growth 7074.
 production, *Bacillus*, milk 1909.
 serum levels, bioassays, *Pseudomonas aeruginosa* acyl-CoA synthetase, *Candida tropicalis* acyl-CoA oxidase 586.
 +synthetic hepatitis B surface antigen conjugate, immunogenicity, use vaccines, animal models 4071.

Fatty acids, (continued)

unsaturated, Legionella, structure detection, methodology 9308.
volatiles, methanogenesis, digestion (anaerobic), food processing, industrial wastes 5704.

Fatty acyl-CoA oxidase,

activity, Phanerochaete chrysosporium mycelia, hydrogen peroxide production, lignin biodegradation 3476.

Fatty acid synthetase,

amino acid sequence, Escherichia coli 900.

Fecal coliforms,

antibiotic resistance, chlorotetracycline, Bolatun, pigs 5711.

Aves, microbial pollution, rivers, Canada 1502.

chlorine disinfection, waste water, ponds 6671.

counting methods, media (enrichment), chlorination, wastewater treatment effluents 1470.

disinfection, heat+hydrogen peroxide, septic tanks effluents 9243.

hydrocarbons, biodegradation, waste water, oil installations 2374.

indicator species, inactivation, waste water, marine environment 1499.

indicator species, lipic acid reduction, potentiometry, microbial pollution, water analysis 2392.

indicator species, microbial pollution, drainage, water quality, soil amendment, manure, crop fields 6709.

indicator species, microbial pollution, sewage effluents, hydrology, estuaries 6710.

indicator species, microbial pollution, sewage outfalls, coastal waters 6711.

indicator species, mortality, temperature, digestion (aerobic), sewage sludge 1485.

indicator species, pollution monitoring, rivers, Clostridium perfringens 5855.

indicator species, sewage sludge, ocean dumping, marine pollution 2389.

indicator species, wastewater treatment 2342.

indicator species, water quality, pollution effects, waste water, canals 4132.

levels, wastewater treatment association aquaculture, Hypophthalmichthys molitrix, Anstichthys nobilis 1463.

measuring techniques, marine environment 2390.

media (culture), agar, recovery, water 8415.

media (selective), gelatin 1901.

microbial pollution, chlorination, swimming pools 567.

microbial pollution, surface water, pollution detection, enumeration, pour-plate method 2397.

most probable number, pollution monitoring, rivers 1495.

pollution monitoring, lakes 2398.

reduction, calcium oxide, sewage sludge, land disposal 2375.

release, cattle feces, rain, water quality 6611.

resistance, inactivation, role, aluminum sulfate treatment, eutrophic environments, lakes 9252.

removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

self-purification, pollution monitoring, lakes 569.

tetracycline, antibiotic resistance, pigs, characterization 1317.

water, pollution monitoring, rivers, Brazil 7535.

water, recreation sites, membrane filtration, detection 8418.

water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, self-purification, pollution monitoring, lakes 569.

water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, pollution monitoring, rivers, Brazil 7535.

water, water, recreation sites, membrane filtration, detection 8418.

water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, self-purification, pollution monitoring, lakes 569.

water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, self-purification, pollution monitoring, lakes 569.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, tetracycline, antibiotic resistance, pigs, characterization 1317.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, pollution monitoring, rivers, Brazil 7535.

water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, water, recreation sites, membrane filtration, detection 8418.

Feedback inhibition, (continued)

ethanol, chemotaxis, Saccharomyces cerevisiae 6938.

ethanol, D-xylose fermentation, Schizosaccharomyces pombe 3589.

ethanol production, growth conditions, fermenters, Candida utilis 3629.

fermentation, anaerobic bacteria 4251.

glucose, cellulose, cellulose hydrolysis, cellulase, Thermomonospora 8692.

regulation, plasmid stability, chemotaxis, methylotrophic bacteria 9303.

D-xylose conversion, ethanol production, Schizosaccharomyces pombe 3644.

Feeding,

Aves, Oospira lactis triacylglycerol lipase, captivity 7008.

glucose, Escherichia coli batch culture, electrodes monitoring 678.

Larus ribundus, association, Salmonella contamination sewage sludge, excretion relationship, serotyping 9245.

soil microorganisms, bacteria, actinomycetes, Aphelenchus avenae 7263.

Feeding behavior,

feeds contamination, mycotoxins, chickens 7898.

Feeding regimes,

Fusarium mycotoxins, turkeys, females, reproduction 3720.

Feeds,

additives, antibiotics, antibiotic resistance, bacteria, livestock, reviews 9062.

additives, avoparcin, effects on feed efficiency, cattle 7878.

additives, chlorotetracycline, antibiotic resistance, aerobic bacteria, coliforms, animal isolates, pigs 6295.

additives, growth regulators, antibiotic sensitivity testing, gram-positive bacteria, intestinal microflora, animal isolates 3729.

afatoxins contamination correlation zinc levels, chickens 4473.

animals, aflatoxins detection, Zaire 7057.

animals, detection aflatoxins, India 7051.

animals, detection, mycotoxins, methodology, use, high-performance liquid chromatography, thin-layer chromatography 7053.

animals, isolation Aspergillus, aflatoxins biosynthesis in vitro, Egypt 7062.

animals, mycotoxicosis association ingestion, Yugoslavia 7048.

animals, mycotoxins food contamination, screening methodology, British Isles 7047.

animals, rubratoxin B Penicillium, use, thin-layer chromatography, methodology, factors affecting 7054.

antibacterial activity, chlorotetracycline, virginiamycin, pigs, Salmonella typhimurium experimental infection 4466.

antibiotic resistance containing, animal isolates, anaerobic bacteria, chlorotetracycline antibiotic resistance, pigs 2197.

antibiotics, relationship R factors, antibiotic resistance, animal isolates, Escherichia coli 4003.

chickens, decontamination, Salmonella, microwave radiation, steam, hot air 1066.

chickens, molds food contamination, ingestion effects on body weight 7014.

chickens, mycoflora, aflatoxins biosynthesis, accumulation, storage conditions effects on 7094.

contamination, aflatoxinol, aflatoxin B1, aflatoxin M1, levels, eggs, tissues, chickens 8727.

contamination, aflatoxins, oilseed crops 7899.

contamination, mycotoxins, detoxification 7893.

contamination, mycotoxins, feeding behavior, chickens 7898.

contamination, Salmonella, chickens 7009.

contamination, Staphylococcus, coliforms, Salmonella, slurnes, sheep 7018.

contamination, vomitoxin, pregnancy, pigs, effects on fetuses 2746.

corn, pelleting, propionic acid, preservatives, effects on fungi, contamination 7884.

digestion (aerobic), effects on nutritive value, manure, chickens 6201.

domestic animals, biodegradation, Aspergillus fumigatus 1025.

ducks, Ferosin toxicity 5354.

fermentation, microorganisms 5353.

fishery products, radiation disinfection, bacteria 5359.

isolation, Salmonella, serotypes, biotypes 6993.

molluscs, contamination, yeasts immobilized cells bioreactors, ethanol fermentation 6123.

mycotoxins, surveillance, Australia 1074.

nutritive value, animal wastes, fermentation, silage, pigs 7019.

Paeclomyces varioli, chickens, nutritive value 7103.

preservatives, N-oxime ethers, antifungal activity 8713.

production, fermentation, silage, tropical environment, Gramineae 5358.

proteins levels, measuring technique, Streptomyces griseus proteinase 6047.

proteins, production, association, corn+ whey fermentation 982.

pyrantel tartrate, +lysozin, +lincomycin, prophylaxis, treatment, Treponema hyodysenteriae, dysentery, pigs 1918.

Saccharomyces cerevisiae, effects on growth, chickens 7874.

Saccharomyces cerevisiae single-cell protein, toxicity, pathogenesis, buffaloes 1071.

Salmonella recovery, media (enrichment), pyruvic acid effects on 3322.

single-cell protein, nutritive value 1914.

storage buildings, isolation, fungi pathogens 582.

supplements, Lactobacillus plantarum, lysine biosynthesis, nutrient requirements, colonization, gastrointestinal tract, chickens 7010.

turnips + straw, digestibility, inhibition cellulytic bacteria, rumen, cattle 1920.

waste treatment, microorganisms 5351.

Feline panleukopenia virus,

antigens, antigenicity, vaccines production 6619.

Fenarimol,

fungicides, disease control, leaf rust, stripe rust, triticum aestivum 2904.

Fensulfothion,

biodegradation, bacteria, pesticide pollution, soil pollution 2173.

Fenticnazole,

Candida albicans morphology, effects on 5737.

Ferbam,

sensitivity, ectomycorrhizas, silviculture 7299.

Fermentation,

acetic acid, kinetics, methanogenesis, methanogenic bacteria 3002.

Acetobacter aceti, vinegar production, sap, Nypa fruticans 6999.

acetone butanol, inhibition levels, Clostridium acetobutylicum 962.

adiabatic, heat production, measuring techniques, water baths 5271.

agricultural wastes, thermophilic microorganisms, use, cultivation, Agaricus bisporus 8408.

alcoholic beverages, yeasts, lactic acid bacteria 5273.

amlyo-1,6-glucosidase recovery, Aspergillus niger, wheat 204.

anaerobic bacteria 2726.

anaerobic conditions 7651.

animal wastes, bacteria methane production, kinetics, mathematical models 9033.

fermentation, (continued)

antibiotics production optimization, purification 4041.
 antioxidants production, structure, *Penicillium janthinellum* 4397.
 applications, immobilized enzymes methodology, characterization, *Saccharomyces cerevisiae*, mycelia *Aspergillus niger* 4408.
 association, microorganisms growth, kinetics mathematical models 2530.
 association, *Saccharomyces cerevisiae*-*Saccharomyces mellis* protoplast fusion 971.
 aureofungin, hamycin, fungi, high-pressure liquid chromatography, isolation, antifungal activity 8900.
 bacteria, genetic engineering, proteins, recovery, reviews 7812.
 bacteria, *Hordeum vulgare* straw, pretreatment, use, alkalis, cellulase, effects on 1045.
 bagasse, bacteria single-cell protein production 1734.
 basidiomycetes, straw, fractionation 155.
 batch culture, models, kinetics 3631.
 beer, antifoam agents effects on bitterness compounds formation, yeasts 3587.
 beer, histamine levels 6131.
 beer spoilage, bacteria detection 6940.
 beer, use, yeasts immobilization 8670.
 beer, wort addition, flavor, yeasts 2691.
 biomass measurements, cellulose biodegradation, monitoring, computer applications, *Sporocytophaga myxococcoides* 6185.
 bioreactors, immobilization, biomass support particles, yeasts 4219.
 bioreactors, measuring techniques errors 175.
 bioreactors, reviews, microorganisms 5875.
 bioreactors, structure, methodology 7809.
 biotechnology, books 5091.
 books 1684.
 bread production, yeasts 5332.
 brewing, biotechnology, genetic engineering, conferences 3390.
 brewing, levels, zinc, copper, yeasts 6128.
 brewing, protoplast fusion, *Saccharomyces carlsbergensis* 2687.
 butanol, hydrogenase activity, carbon monoxide inhibition, *Clostridium acetobutylicum* 8646.
 1-butanol production, extraction 5258.
 Candida ingens, animal wastes treatment, proteins production 158.
 Candida utilis, pigments production, extracts, *Beta vulgaris* 6069.
 carbohydrates, detection, methodology comparison, *Haemophilus* 3281.
 carbohydrates, solvents production, pulp mills, wood, *Clostridium* 5259.
 carbon sources, sulfate liquor, single-cell protein production, *Pichia labacensis* sp.nov. 6816.
 carbon sources, use bagasse hydrolysates, hemicelluloses, carbohydrate composition, amino acid composition, sugars 8677.
 cassava, single-cell protein production, *Rhizopus oligosporus* 1714.
 cellulose, glucose, xylene, mixtures, ethanol production, mixed culture, *Clostridium saccharolyticum*, *Zymomonas anaerobia* 8661.
 cellulolytic enzymes, ethanol, fuels, microorganisms 162.
 cellulolytic microorganisms, fungi 1004.
 cellulose, *Acetivibrio cellulolyticus* 172.
 cellulose, association, nutrient concentrations, batch culture, *Clostridium thermocellum* 4443.
 cellulose, cellulase activity, *Trichoderma* 3622.
 cellulose, *Clostridium thermocellum*-*Acetogenium kivui* mixed culture 8671.
 cellulose, ethanol, production, methodology, yeasts 7806.
 cellulose, ethanol, production, yeasts, *Fusarium*, *Mucor*, reviews 6107.
 cellulose, production, acetic acid, *Clostridium thermocellum* 5969.
 cellulose, production, ethanol, n-butanol, acetic acid, n-butyric acid, *Clostridium* 6150.
 cellulose, single-cell protein production, crop residues, cellulolytic microorganisms 3726.
 cellulose, yeasts 6955.
 Chaetomium cellulolyticum, single-cell protein production, reactors, straw, *Chaetomium* 1711.
 Chaetomium cellulolyticum, Zea mays crop residues, n-butylamine pretreatment 183.
 characterization, gram-negative bacteria 2685.
 chickens feces, fungi screening 3586.
 chitosan production, *Absidia coerulea* 6889.
 citric acid production, *Aspergillus niger* 6813.
 citric acid production, *Candida lipolytica* 5962.
Clostridium acetobutylicum, production, acetone, butanol 140.
 cocoa 5323.
 cocoa, microorganisms, biochemical analysis 7848.
 coffee, microorganisms 5324.
 composts, culture, Basidiomycetes 8706.
 conditions, triacylglycerol lipase biosynthesis, *Bacillus stearothermophilus* 8020.
 conferences 3393.
 continuous culture, mathematical models, optimization, methodology 7805.
 continuous culture, mathematical models, oscillations, levels, substrates, biomass 5280.
 continuous culture, mixed culture growth condition 3633.
 continuous culture, *Saccharomyces cerevisiae*, extraction, ethanol 7808.
 control, effects on organoleptic properties, wine 6120.
 corn, ethanol production, *Aspergillus awamori*, *Aspergillus niger* 5290.
 corn, ethanol production, yeasts, γ radiation effects on 151.
 corn, lactic acid bacteria, 6-phosphate, phosphorus release 6977.
 corn: whey, production, ethanol, proteins feeds 982.
 criteria, carbohydrates hydrolysis 3666.
 crop residues, ethanol production, immobilized cells, *Saccharomyces* 3641.
 crop residues, ethanol production, *Malus* 3623.
 crop residues, methane production, reviews, microorganisms 5703.
 crop residues, pretreatment, production, carbohydrates, ethanol 5307.
 crop residues, production, butanol, acetone, *Clostridium acetobutylicum* 7832.
 cucumbers, cabbage, lactic acid bacteria 5330.
 data analysis, information systems 7796.
 digestion (anaerobic), waste treatment, microorganisms, single-cell protein, ethanol, production, books, conferences 8500.
 dissolved oxygen levels, mathematical models 8502.
 dissolved oxygen transfer, kinetics, mathematical models 6118.
 dough, bakery products, microorganisms 5326.
 echinomycin derivatives biosynthesis, quinoxaline-carboxylic acid analogs effects on, *Streptomyces echinatus* 5799.
 energetics, microorganisms 3678.
 energy resources, industrial wastes, processing, citrus 6102.
 enzymes comparison, Alkaligenes, *Nocardia opaca*, *Xanthobacter autotrophicus* 150.
 erythromycin A, erythromycin B, high-performance liquid chromatography,

Fermentation, (continued)

Streptomyces erythraeus 3111.
 erythromycin production, lipids monitoring, optimization, *Streptomyces erythraeus* 6546.
 ethanol, bacteria, monitoring, methodology 994.
 ethanol, beer, yeasts 5327.
 ethanol, *Beta vulgaris* juices, *Saccharomyces cerevisiae* 987.
 ethanol, *Candida wickerhamii*, cellulose, glucose 985.
 ethanol, catabolite repression, corn, *Saccharomyces cerevisiae* 2677.
 ethanol, continuous culture, reviews 6117.
 ethanol, corn, mannitol, sorbitol, inhibition, *Saccharomyces cerevisiae* 2678.
 ethanol, cross-flow bioreactors, immobilized cells, *Saccharomyces cerevisiae* 3605.
 ethanol, distilleries, breweries, enzymes 161.
 ethanol, energy requirements reduction 174.
 ethanol, flour stimulation, *Zymomonas mobilis* 2680.
 ethanol, growth, enhancement, *Pachysolen tannophilus*, mutants, association, xylene 6144.
 ethanol, immobilized cells fermenters, mathematical models 156.
 ethanol, immobilized cells, *Kluyveromyces fragi* 2689.
 ethanol, immobilized cells, *Zymomonas mobilis*, *Saccharomyces cerevisiae*, *Kluyveromyces fragilis* 166.
 ethanol, *Kluyveromyces fragilis*, use, lactose, bioreactors 1869.
 ethanol levels, sensors, computer applications 3635.
 ethanol, *Manihot esculenta*, *Rhizopus koji* 3610.
 ethanol, measuring techniques, gas chromatography, methodology 7811.
 ethanol, membranes, bioreactors, *Saccharomyces cerevisiae* 7804.
 ethanol monitoring, sensors, *Saccharomyces cerevisiae* 4419.
 ethanol, *Pachysolen tannophilus*, monitoring, measuring techniques 3611.
 ethanol production, ammonium stimulation, *Saccharomyces cerevisiae* 3626.
 ethanol production, bacteria 6937.
 ethanol production, bioreactors, optimization, mathematical models, *Saccharomyces cerevisiae* 6138.
 ethanol production, continuous culture, mathematical models 6137.
 ethanol production, measuring techniques, use, gas chromatography, computer applications 160.
 ethanol, production, microorganisms, reviews 6110.
 ethanol production, monitoring, oxygen consumption, carbon dioxide, computer applications, *Saccharomyces cerevisiae* 6140.
 ethanol production, optimization, yeasts 8660.
 ethanol production, oscillations, mathematical models, continuous culture, *Saccharomyces cerevisiae* 6119.
 ethanol, production, *Saccharomyces cerevisiae*, *Zymomonas mobilis*, genetic engineering, reviews 6112.
 ethanol, production, South America, reviews 6108.
 ethanol production, *Zymomonas mobilis* 7795.
 ethanol, *Saccharomyces cerevisiae*, carbon sources, nitrogen sources, molasses 3607.
 ethanol, *Saccharomyces cerevisiae* strains, hybrids development 6146.
 ethanol, *Saccharomyces uvarum* 3616.
 ethanol, single-cell protein, temperature effects on, *Candida tropicalis* 4411.
 ethanol, toxins, growth rate inhibition, yeasts 2679.
 ethanol, use, *Escherichia coli*, xylene isomerase, xylulokinase, genes, cloning 983.
 ethanol, use, grain, vapors phase separation techniques 1875.
 ethanol, whisky, models 176.
 ethanol, wine, brandy, yeasts, lactic acid bacteria 5279.
 ethanol, yeasts 6127.
 ethanol, yeasts immobilized cells bioreactors, molasses feeds contamination 6123.
 ethanol, *Zymomonas mobilis* 2694.
 ethanol, *Zymomonas mobilis*, *Saccharomyces cerevisiae* 3614.
 fatty acids inhibition, viability, *Saccharomyces cerevisiae* 3625.
 feedback inhibition, anaerobic bacteria 4251.
 feeds, microorganisms 5353.
 flour, sugars, gas chromatography, Uji, fermented food, lactic acid bacteria 3692.
 food, biotechnology, books, microorganisms 5941.
 fuels production, industrial wastes, paper mills, lignocelluloses hydrolysis, cellulolytic microorganisms 7781.
 fungi, tubers extracts, saponins purification, *Ficaria ranunculoides* 5222.
Fusarium oxysporum, carbon sources 1860.
 genetic engineering, conferences, books 4250.
 genetic engineering, gene transfer, *Clostridium*, *Bacillus*, reviews 3593.
 glucose, acetone, glucose effects on, batch culture, *Clostridium acetobutylicum* 3545.
 glucose, butanol production, *Clostridium* 5236.
 glucose, *Escherichia coli*, effects on cloacin excretion 2688.
 glucose, ethanol extraction, *Saccharomyces cerevisiae* 5276.
 glucose, ethanol production, batch culture, *Zymomonas mobilis* 3602.
 glucose, ethanol production, carrageenans immobilized cells, *Zymomonas mobilis* 5300.
 glucose, ethanol production, factors affecting, *Saccharomyces carlsbergensis* 7815.
 glucose, ethanol production, fermenters, immobilized cells, *Saccharomyces cerevisiae* 3606.
 glucose, ethanol production, *Saccharomyces cerevisiae* 8655.
 glucose, glycerol, production, *Pichia farinosa* 3609.
 glucose, isocitric acid production, *Candida raubitsi* 5961.
 glucose, methanogenesis, Michaelis-Menten parameters, methanogenic bacteria 8266.
 glucose, production, acetone, butanol, batch culture, *Clostridium acetobutylicum* 4383.
 glucose, products, pH, effects on, *Bacillus macerans* 2690.
 glucose, sensors 3531.
 glucose, 1-butanol production, *Clostridium cochlearium*, *Clostridium tetanomorphum* 8648.
 glucose, 2,3-butanediol production, *Bacillus polymyxa* 7782.
 glycerol production, yeasts 7770.
 growth conditions, bacteria, fungi 852.
 growth, glucose metabolism, mathematical models, *Saccharomyces cerevisiae* 6121.
Helianthus tuberosus, ethanol production, immobilized cells, *Kluyveromyces marxianus* 3640.
Helianthus tuberosus tubers, ethanol production, *Saccharomyces cerevisiae*, *Kluyveromyces fragilis* 5297.
 hemicellulose, cellulase activity, *Trichoderma* 3622.
 hemicelluloses, energy resources, *Bacteroides* 6156.
 hemicelluloses, ethanol production, *Thermoanaerobacter ethanolicus* 5284.

Fermentation, (continued)

hemocelluloses, 2,3-butanediol production, *Bacillus polymyxa* 5223.
 high-gravity wort, nutrient requirements, ethanol production, *Saccharomyces uvarum* 8667.
 hydrocarbons, carbon sources, single-cell protein production, reviews 8288.
 immobilized cells use, yeasts, conversion, xylose, cellulose, books 2539.
 industrial applications, fungi, yeasts 9169.
 industrial wastes, soil amendment, soil microorganisms 8258.
 inulin, ethanol production, *Kluyveromyces marxianus*, stalks, *Helianthus tuberosus* 5298.
 inulinase production, optimization, *Aspergillus niger* 5179.
 kinetics, methane production, digestion (anaerobic), bioreactors 4404.
 laboratories, mathematical models correction 2676.
 β -lactam antibiotics, reviews 5760.
 lactic acid bacteria, inoculation, silage, Zea mays 7876.
 lactic acid, immobilized cells, *Lactobacillus delbrueckii*, *Lactobacillus bulgaricus* 8.
 lactic acid, microorganisms growth association, kinetics mathematical models 2530.
Lactobacillus cellobiosus, *Phaseolus vulgaris* beans, mannitol biodegradation, *Lactobacillus plantarum* 7003.
 lactose, ethanol, bioreactors, *Kluyveromyces fragilis* 3590.
 lactose, ethanol production, *Kluyveromyces fragilis* 5289.
 lactose, plasmids curing, identification, media (culture), temperature effects on, *Streptococcus lactis* 7864.
 lactose, *Streptococcus lactis* characterization 1873.
Laucena leucoccephala, molasses effects on 3724.
 lignocelluloses, biomass measuring techniques, nitrogen-15, mass spectroscopy, *Chaetomium cellulositum* 5310.
 lignocelluloses, crop residues, ethanol production, *Saccharomyces cerevisiae* 5292.
 lignocelluloses, ethanol production, cellulase + hydrogen peroxide 5303.
 lignocelluloses, ethanol, production, *Clostridium thermocellum*, *Clostridium thermosaccharolyticum*, *Clostridium thermohydrosulphuricum* 4418.
 lignocelluloses, production, ethanol, *Candida acidothermophilum* 3617.
 lignocelluloses, why, single-cell protein production, conferences 2544.
 lignocelluloses, and rot, optimization, *Triticum aestivum* 1887.
 limiting factors, glucose, lactose, dairy starters, *Streptococcus lactis* 6994.
 lipids, carbon sources, aeration, salinocyclop production, *Streptomyces aerosol* 4874.
 mash, microorganisms enzymes, breweries 163.
 mathematical models, biomass, age distribution 6129.
 mathematical models, statistical analysis 6141.
 meals corn, vitamins levels, lactic acid bacteria 5356.
 meals, soybeans + corn, effects on amino acid composition, lactic acid bacteria 5357.
 meals, soybeans + corn, effects on nutritive value, minerals, lactic acid bacteria 5355.
 measuring techniques, gas chromatography, levels, ethanol, butanol, acetone, *Saccharomyces cerevisiae* 3581.
 media, *Bacillus thuringiensis*, sporulation, toxins biosynthesis 6070.
 media (culture), biochemical analysis, monitoring, automated methods 6142.
 Medicago sativa juices proteins, lactic acid bacteria 3722.
 Medicago sativa, lactic acid bacteria effects on 3723.
 metabolites, biotechnology, microorganisms 7852.
 methanol addition, computer applications monitoring, batch culture, *Pseudomonas* 8633.
 methanol, batch culture, *Methylomonas methanolovorans* 121.
 methodology, ethanol, production, *Zymomonas mobilis*, reviews 8109.
 methodology, *Penicillium nigricans*, mycotoxins biosynthesis 7043.
 microorganisms, industrial strains, mutagenesis, screening, yield 1837.
 microorganisms strains improvements, genetic engineering, reviews 6124.
 milk, biosynthesis, fatty acids, lipids, dairy starters 7865.
 milk, continuous culture, dairy starters, yogurt production, lactic acid bacteria 6997.
 milk, *Streptococcus lactis*, lactose, genes, role 2739.
 mixed culture, lactic acid bacteria + yeasts, vegetables 7871.
 molasses, citric acid production, nutrient requirements, *Aspergillus niger* 8514.
 molasses, ethanol production, immobilized cells, *Saccharomyces formosensis* 168.
 molasses, ethanol production, immobilized cells, *Saccharomyces cerevisiae* 8659.
 molasses, ethanol production, *Saccharomyces cerevisiae*, immobilized cells 167.
 molasses, industrial effluents, digestion (anaerobic), methanogenesis 8401.
 monitoring, automated methods, computer applications 6116.
 monitoring, computer applications 6145.
 monitoring, computer applications, yeasts 5966.
 monitoring, flow cytometry, poly- β -hydroxybutyrate intracellular levels, *Alcaligenes eutrophus* 9295.
 monitoring, mass spectroscopy, computer applications 170.
 monitoring, mathematical models 6139.
 monitoring, mathematical models, computer applications 6115.
 monitoring, mathematical models, growth, proteins distribution, flow cytometry, *Saccharomyces cerevisiae* 6126.
 monitoring, sensors, carbon dioxide, dissolved oxygen 6114.
 musts, pesticide residues, fungicides, protection, *Botrytis cinerea* 3601.
 musts, volatiles production, activators effects on, *Botrytis cinerea* 3608.
 musts, wine production, aroma compounds, organoleptic evaluation, *Schizosaccharomyces acidodevoratus* 6933.
 musts, wine, temperature effects on, organoleptic properties 1871.
Nocardia coralina, 19-norsteroids intermediates, sterols, Glycine max 1823.
 nucleotides, manganese, deficiency effects on, *Brevibacterium ammoniagenes*, *Micrococcus luteus*, DNA biosynthesis, precursors 951.
 optimization, computer applications, mathematical models 6133.
 optimization, ethanol production, sodium azide effects on electron transport cytochrome c oxidase, *Saccharomyces cerevisiae* 3624.
 organic acids, rumen microorganisms, cattle 1919.
 organoleptic evaluation, beer, fermenters, yeasts 6932.
 oxidation, media, acid production detection, *Neisseria*, *Branhamella catarrhalis* 1658.
 oat hydrolysates, ethanol production, yeasts 6930.
 penicillin, fermenters, dissolved oxygen, aeration, immobilized cells, *Penicillium chrysogenum* 7435.
 penicillin, *Penicillium chrysogenum*, automated methods, monitoring, fermenters 4833.
 penicillin, *Penicillium chrysogenum*, fermenters 4832.
 penicillin production, *Penicillium* 7434.
 penicillin V precursors detection, electrochemistry 1396.

Fermentation, (continued)

Penicillium caseicola, soybean milk curd, bromelain coagulants 7852.
Penicillium digitatum, ethylene production, use, Citrus wastes 973.
 petroleum, single-cell protein production, yeasts 5960.
 Phanerochaete chrysosporium + *Candida utilis*, mixed culture, single-cell protein production, fermentation, straw, *Triticum aestivum* 1710.
 Phanerochaete chrysosporium + *Candida utilis*, mixed culture, single-cell protein production, *Triticum aestivum* 1710.
 Phoenix dactylifera wine, yeasts, lactic acid bacteria, acetic acid bacteria 5288.
 physiology, factor affecting, ethanol tolerance, *Clostridium thermohydrosulphuricum* 6135.
 pollutants, anaerobic conditions, soil 5670.
 processes, books 3376.
 processes, computer applications, microorganisms 2551.
 production, butanol, ethanol, continuous culture, *Clostridium thermosaccharolyticum* 3578.
 production, ethanol, acetic acid, acetoin, 2,3-butylen glycol, lactic acid bacteria 5240.
 production, glutamic acid, ethanol, optimization, mathematical models, *Saccharomyces cerevisiae*, *Brevibacterium divaricatum* 5964.
 production, single-cell protein, yeasts, methodology 7880.
 products, purification, affinity chromatography, reviews, biotechnology 5227.
 products recovery, methodology 5103.
 proteinase, isolation, *Rhizopus rhizoidiformis* 4299.
 rates, organic acids production, supports effects on, *Kluyvera noncitrophila* 5301.
 reviews, books 5093.
Rhizopus oligosporus, soybeans meals, characterization 7016.
 role, *Botrytis cinerea* esterase activity 4410.
 role flocculation activity, spheroplasts membrane fusion, *Saccharomyces diastaticus*, *Saccharomyces cerevisiae* 8637.
 rumen microorganisms continuous culture, liquids dilution rates, pH 5295.
Saccharomyces cerevisiae, ammonium, enhancement, characterization 7810.
Saccharomyces cerevisiae, hydrolysis, *Pinus radiata*, wood, inhibitors 7807.
Saccharomyces cerevisiae, pesticide residues biodegradation association 990.
Saccharomyces cerevisiae strains, homozygotes, cytoplasmic inheritance, flocculation 5268.
Saccharomyces italicus, gases liquids phase transition, spectrometry fermenters 154.
Saccharomyces uvarum, immobilized cells, ethanol production, juices, Sorghum 8658.
Saccharomyces uvarum, mutants, ethanol production 7802.
Saccharomycopsis fibuligera, *Candida utilis*, potatoes food processing waste water, biomass 157.
Saccharum officinale crop residues, continuous culture, *Candida utilis* + *Paeclomyces variotii* 3686.
Saccharum officinale, *Lactobacillus ammonia*, yeasts, *Lactobacillus* 2754.
 α -santonin hydrogenation, 1,2-dihydro- α -santonin production, stereochemistry, *Streptomyces cinereocrocutus* 5245.
 sensors, glucose, sucrose, fructose 3530.
 silage, acid production, lactic acid bacteria, Zea mays 7873.
 silage, ammonia pretreatment effects on Zea mays 4467.
 silage, animal wastes, nutritive value, feeds, pigs 7019.
 silage, effects on digestibility, Zea mays, crop residues, cattle 7877.
 silage, effluents, wastewater treatment 6683.
 silage, lactic acid bacteria 7013.
 silage, lignocelluloses, feeds production, tropical environment, Gramineae 5358.
 silage production, industrial wastes, fishery products, lactic acid bacteria 2753.
 silage, water content, time effects on, acid production, Medicago 2745.
 single-cell protein production, optimization, cost-benefit analysis, bioreactors, *Hansenula polymorpha*, *Methylomonas* 5963.
 single-cell protein production, optimization, monitoring, computer applications, *Saccharomyces cerevisiae* 5967.
 single-cell protein production, *Sporobolus pulverulentum*, *Trichoderma viride*, industrial wastes, oilseed crops, Olea europaea 5114.
 solid wastes, enzymatic activity measurements 545.
 Sorghum juices, ethanol production, Yeasts 5302.
 starch, ethanol production 8682.
 starch residues, food industry, single-cell protein production, *Aspergillus*, *Trichoderma* 1713.
 starch, *Schwannomyces castelli*, factors affecting 197.
 starch, single-cell protein, *Schwannomyces castelli* 1721.
 straw, yeasts biomass production 8526.
Streptomyces albus, acetic acid steroids 6049.
 sucrose, ethanol production, monitoring, computer applications, immobilized cells, *Saccharomyces cerevisiae* 6143.
 sucrose, *Streptococcus lactis* plasmid p5N conjugation, nisin biosynthesis 3146.
 sucrose, *Zymomonas*, ethanol production, reactors 153.
 sugar beets, single-cell protein production, *Trichoderma* max 1716.
 sugar, lignocelluloses hydrolysis, cellulase, reviews, microorganisms 2559.
 sugars, ethanol, cellulose hydrolysis, cellulolytic enzymes, cost-benefit analysis, *Trichoderma reesei* 5299.
 sugars, ethanol production, cost-benefit analysis, tubers, *Beta vulgaris* 8656.
 sugars, ethanol production, immobilized cells, *Saccharomyces cerevisiae* 6130.
 sugars, ethanol production, Maillard reaction, *Saccharomyces cerevisiae* 8662.
 sugars, lactic acid bacteria identification methodology 4198.
 sugars, lactic acid, *Lactobacillus cellobiosus*, beans, yeasts, Glycine max 5316.
 sugars, *Lactobacillus cellobiosus*, yeasts, beans, Glycine max 6980.
 sugars, starch, amylolytic enzymes pretreatment, ethanol production, *Zymomonas mobilis* 8663.
 sugars, *Streptococcus lactis*, hydrogen peroxide bioaccumulation 2686.
 sugars, wood hydrolysis, sugars, enzymes, ethanol production 7814.
 sulfite liquor, *Candida* 6169.
 sulfite liquor, single-cell protein production, *Candida utilis* 7671.
 sulfite liquor, single-cell protein production, *Pekilo* process, monitoring, *Paeclomyces variotii* 5968.
 tapache, *Pichia membranaefaciens*, *Saccharomyces cerevisiae* 1898.
 thermodynamics, calorimetry, monitoring, continuous culture, *Saccharomyces cerevisiae*, *Escherichia coli* 6080.
 thermodynamics, mathematical models, *Clostridium* 3549.
 thiokinone production, ammonium stimulation, *Agrobacterium* 7881.
 use crop residues, cellulolytic enzymes, pectinolytic enzymes, microorganisms 213.
 use, microorganisms, products biosynthesis, books 5096.

fermentation, (continued)

vegetables, dialysis, continuous culture, lactic acid bacteria 2740.
wastewater treatment, industrial effluents, potatoes, food industry 2350.
whey, cyanocobalamin, production, *Propionibacterium*, *Propionibacterium shermanii* 145.
whey, ethanol, *Kluyveromyces fragilis*, immobilized cells 2684.
whey, ethanol production, continuous culture, *Kluyveromyces fragilis* 3604.
whey, galactoseic acid biosynthesis, *Fusarium moniliforme*, mathematical models 5970.
whey, lactose, ethanol production, catabolite repression resistance mutants, *Saccharomyces cerevisiae* 8668.
whey, lactose, ethanol production, immobilized cells, *Kluyveromyces marxianus*, *Saccharomyces cerevisiae* 1864.
whey permeate, *Kluyveromyces marxianus*, ethanol production 8669.
whey production, butanol, acetone, *Clostridium acetobutylicum* 3546.
whey, single-cell protein, amino acid composition, yeasts 1722.
whey, single-cell protein production 1718.
whey, single-cell protein production, *Kluyveromyces fragilis* 1723.
whey, single-cell protein production, yeasts 1717.
whey, single-cell protein production, yeasts 3420.
whey, single-cell protein, yeasts 1720.
whey, 2,3-butylene glycol production, *Klebsiella pneumoniae*, *Enterobacter aerogenes* 2643.
wine, acetic acid bacteria succession 6134.
wine, grapes post-harvest decay effects on, fungi 6939.
wine, *Lactobacillus delbrueckii*, malic acid, genes, cloning, *Escherichia coli*, *Saccharomyces cerevisiae* 2681.
wine, organic compounds, acids effects on, microorganisms 8672.
wine production, fatty acids by-products, inhibition, yeasts 5286.
wine, *Saccharomyces cerevisiae*, nontarget organisms, toxicity herbicides, insecticides, fungicides 2082.
wine, *Saccharomyces ellipsoideus*, relationship, *Vitis vinifera* content, carbon, hydrogen, nitrogen 7793.
wood hydrolysates, hydrogen fluoride pretreatment, ethanol production, *Zymomonas mobilis*, *Clostridium saccharolyticum* 5270.
wort, acetic acid esters production, *Saccharomyces uvarum* 4420.
wort, acetyl-CoA levels, acetic acid esters production, *Saccharomyces cerevisiae* 4416.
wort, ethanol production, α -D-glucosidase activity, *Saccharomyces carlsbergensis* 5287.
wort, phenyl carbonic acids production, temperature effects on, flavor, beer 2682.
wort, *Saccharomyces cerevisiae*, mezcil 1862.
xylose, *Candida utilis*, anaerobic conditions, effects on ethanol production 991.
xylose, ethanol production, fungi, *Fusarium oxysporum* 3444.
xylose, ethanol production, *Pachysolen tannophilus* 171.
xylose, ethanol production, *Pachysolen tannophilus* 3596.
xylose, ethanol production, *Pachysolen tannophilus* 5281.
xylose, ethanol production, *Pachysolen tannophilus* comparison *Pichia stipitis* 6136.
xylose, ethanol production, *Pachysolen tannophilus*, trifluoroacetic acid hydrolysis, hemicelluloses, straw, *Triticum aestivum* 8657.
xylose, ethanol production, *Schizosaccharomyces pombe* 5294.
xylose, ethanol production, yeasts 5285.
D-xylose, hemicelluloses hydrolysates, ethanol production, yeasts 6935.
D-xylose, ethanol feedback inhibition, *Schizosaccharomyces pombe* 3589.
yeasts, fuels, production, biotechnology, methodology, reviews 7803.
yeasts, single-cell protein, reviews 2752.
Zymomonas mobilis, extracellular levels, ethanol, carbon dioxide, effects on 149.
fermented food,
books 5941.
cassava, organoleptic evaluation, retting, lactic acid bacteria, *Corynebacterium*, *Streptococcus* 3399.
olives, microorganisms 5331.
Pediococcus 6189.
pickles, spoilage, cellulase, fungi, calcium chloride 8699.
production, books 4240.
production, role, lactic acid bacteria, reviews 211.
reviews, microorganisms 5325.
sausages, phase B2 infection, starter cultures, *Lactobacillus plantarum* 5334.
sausages, phase I1 infection, starter cultures, *Lactobacillus plantarum* 5333.
Uji, flour fermentation, sugars, gas chromatography, lactic acid bacteria 3692.
fermented milk products,
Egypt, reviews 4481.
food contamination, mycotoxins, risk factors 7106.
India, *Streptococcus lactis* subsp. *diacetylactis* 4453.
lactic acid bacteria 4447.
lactic acid bacteria detection, enumeration, methodology 1062.
Lactobacillus bulgaricus, feed efficiency, rats 7011.
microorganisms 5329.
quark, production, lactic acid bacteria starter cultures, organoleptic properties 1054.
fermenters,
aeration 8509.
aeration, atmospheric pressure, continuous culture, *Candida utilis* 5924.
agitation equipment, liquid culture, media (culture) 5874.
air filtration, removal, spores, *Bacillus subtilis* 8504.
antibiotics production, continuous culture, oils sterilization 9154.
aspiration 3667.
biotyping, methanogenic bacteria 7305.
Candida utilis, growth conditions regulation 1679.
carbon dioxide utilization, methanol production 3558.
cassava roots, *Aspergillus fumigatus*, single-cell protein production 1709.
characterization, reviews 5876.
Clostridium tetani toxins production, association vaccines 2321.
cooling systems leakage, contamination 8507.
digestion (aerobic), animal wastes, oxygenation 4108.
dissolved oxygen, aeration, penicillin fermentation, immobilized cells, *Penicillium chrysogenum* 7435.
dissolved oxygen, electrodes 5877.
efficacy, foaming 8511.
ejector-loop fermenter, *Kluyveromyces fragilis* use, characterization 1867.
environmental factors, reviews 995.
ethanol, extraction, purification, *Saccharomyces cerevisiae* 5277.
ethanol levels, gas chromatography 4413.
ethanol, production, continuous culture, *Saccharomyces cerevisiae* 981.

Fermenters, (continued)

ethanol production, growth conditions, feedback inhibition, *Candida utilis* 3629.
fermentation, beer, organoleptic evaluation, yeasts 6932.
films formation, pure culture, mixed culture, mathematical models, microorganisms 9270.
gases levels, measuring techniques 4403.
glucose, fermentation, ethanol production, immobilized cells, *Saccharomyces cerevisiae* 3606.
immobilized cells, biomass assessment 3402.
immobilized cells, ethanol fermentation, mathematical models 156.
L-lysine, assays, use, immobilized enzymes electrodes, *Trichoderma viride* lysine 2-monooxygenase 38.
media (culture), dissolved oxygen, mass spectroscopy 5873.
methane production, digestion (anaerobic) 420.
mixed culture, propionic acid biodegradation, methanogenesis 6398.
monitoring, automated methods, penicillin fermentation, *Penicillium chrysogenum* 4833.
mycelia sampling 9332.
oxygen content, temperature distribution 2674.
oxygenation, microorganisms 3230.
parameters, oleandomycin biosynthesis 6545.
penicillin fermentation, *Penicillium chrysogenum* 4832.
penicillin production 4044.
Penicillium mycelia growth, microbeads, penicillin production 2270.
phages production, cloning vectors preparation, *Rhizobium meliloti* 4997.
production, antitumor antibiotics, DNA tumor viruses, aerosols filtration, reduction, risks, occupational exposure 8624.
recovery, microorganisms, methodology, reviews 7655.
Saccharum officinale stillage digestion (anaerobic), mechanisms 1861.
spectrometry, *Saccharomyces italicus* fermentation, gases liquids phase transition 154.
spores production, *Colletotrichum gloeosporioides*, weed control, biological control, *Aschynomone virginica* 3995.
sterility, air filters 8506.
sterility, air, gases, membrane filtration 8505.
sterility, filtration, conferences 9348.
Streptomyces tetracycline biosynthesis, carbon dioxide pressure effects on 2281.
viruses vaccines production, fermenters chick embryos cells growth 4077.
Ferrosin,
yeasts single-cell protein, toxicity, ducks feeds 5354.
Ferredoxin,
+hydrogenase+chloroplasts, immobilization, production, hydrogen, oxygen 5161.
multiple forms, E.S.R., C.D., *Desulfovibrio africanus* 3407.
Ferric chloride,
floculation, poliovirus 1 recovery, beef extracts 4990.
Ferric oxide,
reduction, *Corynebacterium*, soil 8260.
reduction, methodology, assays, *Corynebacterium ferrireductans* 7606.
Ferric tartrate,
+sodium hydroxide, pretreatment, lignocelluloses, hydrolysis, cellulase, *Trichoderma reesei* 8536.
Ferriocin,
iron(II) binding, production, characterization, *Aspergillus versicolor* 8521.
Ferricytochrome c550,
N.M.R., *Paracoccus denitrificans* 7701.
Ferrocytochrome c550,
N.M.R., *Paracoccus denitrificans* 7701.
Ferrous sulfate,
iron(II), oxidation, *Thiobacillus ferrooxidans*, kinetics, chemostats 3000.
Fertilization,
effects on bacteria, soil, catchment areas, surface water, forests 2106.
effects on carbon dioxide production, soil microorganisms 2179.
+Glomus fasciculatus, vesicular-arbuscular mycorrhizas inoculation, effects on growth, *Fraxinus americana*, *Juglans nigra* 7229.
Picea abies, effects on disease resistance, *Heterobasidion annosum* 8169.
Pinus sylvestris, effects on disease resistance, *Heterobasidion annosum* 8169.
Fertilizer applications,
ammonium sulfate, organic matter accumulation, soil microorganisms activity, soil structure, pasture 5640.
+ Azospirillum inoculation, nitrogen fixation, effects on yield, *Oryza sativa* 1273.
+composts, inhalation vesicular-arbuscular mycorrhizas, yield, *Zea mays* 3948.
disease control, tridemorph, benodanil, powdery mildew, brown rust, *Hordeum vulgare* 2900.
effects on, *Cylindrocylindrium crotalariae*, black rot, *Arachis hypogaea* 8772.
effects on *Pinus sylvestris* roots *Amillaria mellea* infection 2923.
effects on *Rhizobium* inoculation, nodulation, *Vigna unguiculata* 2983.
effects on rhizosphere microorganisms, dehydrogenase activity, iron reduction, redox potential, *Oryza sativa* 2997.
inhibition ectomycorrhizas, population levels, roots colonization, *Picea sitchensis* 5552.
mineralization, nitrogen, forests, *Pinus radiata* 5541.
nitrate, ammonium, stimulation phosphate, nutrient uptake, ectomycorrhizas, *Pseudotsuga menziesii* 5574.
nitrogen, effects on, mycorrhizas, *Tsuga heterophylla*, development 5675.
nitrogen fixation, *Oryza* 414.
phosphate, calcium carbonate, effects on soil nitrifying bacteria nitrous oxide production 7283.
phosphate, efficiency, *Pseudomonas striata* seed treatments, *Lens culinaris* 4620.
Phytophthora infestans infection, leaves susceptibility, *Solanum tuberosum* 2812.
sewage sludge, *Brassica caulorapa* quality, nitrogen cycle 2997.
solid wastes, composts, soil amendment, Switzerland 8332.
urea, urease hydrolysis, ammonium production, soil microorganisms 6383.
urease inhibitors, ammonia volatilization 1285.
Fertilizers,
Azolla pinnata, *Oryza sativa* nitrogen cycle 3963.
Azolla pinnata, *Oryza sativa* nitrogen cycle 3964.
+Azotobacter chroococcum, *Aspergillum brasiliense*, nitrogen fixation, inoculation, yield, *Triticum durum* 7277.
effects on, nitrogen fixation, identification, soils (podzolic) 8232.
effects on *Psilolithus tinctorius*, ectomycorrhizas colonization, m-ines, soil, *Pinus* 8931.
industrial effluents, wastewater treatment, nitrogen removal, rotating discs, *Silicobacillus bacillus* + denitrifying bacteria 9236.
nitrogen, effects on *Quercus ectomycorrhizas* 3941.
nitrogen sources, nitrogen fixation, nodulation, *Trifolium repens*, *Lotus*

Fertilizers, (continued)

- pedunculus 2160.
- phosphate, *Glomus mosseae* vesicular-arbuscular mycorrhizas interaction, effects on *Medicago sativa* 3946.
- requirements, *Glomus manihoti* inoculation, yield, *Manihot esculenta* 2934.
- urea, sulfur coatings, savannahs soil, pH, nitrogen levels 8256.

Fertilizers (slow release),

- urea granules, sulfur coatings, nitrification 8231.

Ferulic acid,

- phytoxicity, *Pseudomonas*, *Synecephalastrum racemosum* degradation effects on, allelopathy, *Triticum aestivum* 373.

Festuca arundinacea,

- Acremonium coenophialium* infection, seed treatments, fungicides, disease control 1227.
- Acremonium coenophialium* infection, transmission (seed) 8790.
- blight, *Rhizoctonia*, disease control, fungicides 8172.
- Epichloe typhina infection, fungicides use treatment 8119.
- Epichloe typhina infection, incidence, disease transmission, USA, Kentucky 7979.
- Epichloe typhina sampling methodology, enzyme-linked immunosorbent assay use 796.
- Fusarium tricinum* isolation, T-2 toxin biosynthesis 7059.
- inheritance disease resistance, *Drechslera sorokiniana* infection 6290.
- pathogenicity, *Rhizoctonia zeae*, USA, North Carolina 3802.

Fetuses,

- pigs, pregnancy, vomitoxin feeds contamination effects on 2746.

Q fever,

- Coxiella burnetii*, immunodiagnosis, immunoglobulin G, enzyme-linked immunosorbent assay, man 2436.

Fiberoptics,

- bronchoscopes, *Mycobacterium tuberculosis* contamination, disinfection 3221.

Fibers,

- cocoon, *Basidiomycetes* biodegradation, *Ascomycetes*, *Deuteromycetes*, effects on 1031.
- retting, *Aspergillus niger*, *Cocos nucifera* 7792.

Fibrinogen,

- agar media, *Staphylococcus aureus* enumeration methodology, food contamination 6183.

Fibrinolysis,

- enzymes, production, *Cochliobolus lunatus* 3465.
- role, extracellular proteinase, biosynthesis, U.V. radiation induction
- Streptomyces spheroides* mutants 8583.

Fibroblasts,

- cell culture, attenuation, hepatitis A virus, live vaccines, immunity, animal models 6646.
- cell culture comparison, kidney cells, herpes simplex virus isolation 4981.
- cell culture, hepatitis A virus attenuation, vaccination, immunity, monkeys 4074.
- cell culture, +immunoperoxidase test staining, herpes simplex virus detection 5002.
- herpes simplexvirus detection methodology 4988.
- monolayers, viruses isolation enhancement 4982.
- retrovirus infection, leupeptin inhibition 469.

Fibronectin,

- Staphylococcus aureus* interactions, antibiotics effects on 495.
- Staphylococcus* interactions, leukocytes (polymorphonuclear) phagocytosis, clindamycin effects on 514.

Ficaria ranunculoides,

- tubers extracts, saponins purification, fermentation, fungi 5222.

Ficus benjamina,

- root rot, *Rhizoctonia solani*, *Fusarium oxysporum*, *Pythium aphanidermatum*, *Cylindrocarpon*, disease control, benomyl, PCNB 8916.

Ficus carica,

- plant breeding, disease resistance, host-pathogen interactions, phytopathogenic fungi 2869.

Filamentous microorganisms,

- activated sludge bulking 7495.
- fungi, antibiotic sensitivity testing, agar dilution test 5763.
- sewage sludge bulking, activated sludge 2343.

Film,

- air conditioning, water, bacteria, industries 5849.
- bacteria, organic compounds pollution biodegradation, ground water 8690.
- bacteria, removal, surfaces, glycol-bis(β -aminoethyl ether)-N, N-tetraacetic acid effects on 417.
- bioreactors, nitrification, wastewater treatment 4119.
- formation, microorganisms, bioreactors, kinetics 3205.
- formation, *Pseudomonas fluorescens* fouling organisms, aluminum reactors, liquids 2382.
- formation, *Pseudomonas putida* continuous culture, environmental effects 669.
- formation, pure culture, mixed culture, mathematical models, fermenters, microorganisms 9270.
- methanogenesis, ultrastructure, anaerobic conditions reactors 6397.
- microorganisms, tubes plastics, drinking water 4948.
- oxygen permeability, vacuum packaging, spoilage, mutton 5362.
- pH, denitrification, rotating discs, wastewater treatment 2326.
- polyvinyl chloride, biodegradation, fungi 1032.
- polyvinyl chloride, fungi, contamination, biodegradation 1039.
- substrates kinetics, mathematical models, wastewater treatment, microorganisms 1461.

Filobasidium,

- amylolytic enzymes production 8546.

Filter feeders,

- accumulation, bacteria, indicator species, public health, *Gryphaea gasar* 3217.

Filter paper,

- adsorption, *Escherichia coli* enterotoxins, hemolysis assays 4485.
- ammonifying bacteria detection methodology, disinfection efficacy 7542.
- biodegradation, Gramineae root rot fungi 1001.

Filters,

- air, sterility, fermenters 8506.
- anaerobic conditions, wastewater treatment, removal kinetics, fecal coliforms, phages 1474.
- anaerobic microorganisms, wastewater treatment, coal 5843.
- analysis, *Campylobacter fetus* subsp. jejuni recovery, water-borne diseases 563.
- biotechnology, cell culture, *Trichoderma reesei*, recovery 7635.
- carbon (activated), wastewater treatment, microorganisms, organic matter decomposition 2349.
- comparison, concentration, viruses, waste water, methodology 4952.
- microorganisms, aeration, carbon (activated), waste treatment 6698.
- microorganisms growth, use, gases waste treatment, organic compounds removal

Filters, (continued)

- 3188.
- Neurospora crassa* colonies, hybridization methodology 2534.
- nitrifying bacteria, sea water nitrification, aquaculture 1668.
- noise, computer applications, batch culture, ethanol production, computer applications, yeasts 3630.
- percolation, *Subarramones splendens*, role, sewage treatment 1460.

Filtration,

- air, removal, *Bacillus subtilis* spores, fermenters 8504.
- bacteremia detection methodology, man 2458.
- cell aggregation, use biomass harvesting, *Lactobacillus acidophilus* 6802.
- membranes, industrial water systems, enzymes cleaning, microorganisms 57.
- methodology, methylamine uptake measurement, *Azotobacter vinelandii* 4195.
- methodology, viruses concentration, water 9283.
- peat, wastewater treatment, identification, fungi 7494.
- removal yeasts, bacteria, cheese brines 192.
- sand, methodology, recirculation removal, inactivation, drinking water 9253.
- sterility, fermenters, conferences 9348.

Fingerprinting,

- DNA, methodology, herpes simplex virus identification 8458.

Finland,

- ecological distribution, Boletaceae, ectomycorrhizas, *Pinus sylvestris*, *Betula pubescens* 2100.
- plant viruses, *Ribes* 6268.
- soil, peat, acetylene reduction, nitrogen fixation, ethylene release 4651.
- Solanum tuberosum*, incidence, *Fusarium*, plant diseases 7171.

Fire blight,

- Erwinia amylovora*, disease control, *Pyrus communis* 5443.
- Erwinia amylovora*, *Pyrus communis*, conferences 5947.
- Erwinia amylovora*, *Pyrus communis*, disease transmission, vectors, *Apis* 5442.
- Erwinia amylovora*, *Pyrus communis*, epidemiology 5444.
- Erwinia amylovora*, *Pyrus communis*, epidemiology, detection 5462.
- Erwinia amylovora*, *Pyrus communis*, legislation, disease control 5463.

Fireblight,

- Erwinia amylovora*, disease resistance, plant breeding, cultivars, *Pyrus communis* 8602.
- host plants, symptoms, disease control, reviews 7166.

Fires,

- forests, burning, effects on soil microorganisms 7221.

Fishery products,

- feeds, radiation disinfection, bacteria 5359.
- food processing brines, single-cell protein production, *Candida utilis* 6812.
- industrial wastes, silage production, fermentation, lactic acid bacteria 2753.
- microorganisms contamination, temperature effects on 7002.
- vacuum packaging, chlorotetracycline, +potassium sorbate, +tetrasodium ethylenediaminetetraacetate, preservation 7885.

Fishponds,

- actinomycetes, odor compounds, absorption, off flavor, *Ictalurus punctatus* 3211.

Flechevie virus,

- detection, latex agglutination, *Bombyx mori* 4161.

Flagella,

- bacteria, staining, methodology 1576.
- microorganisms association, rotation measuring techniques 4975.
- Treponema phagedenis*, immunoglobulin M detection, enzyme-linked immunosorbent assay methodology, syphilis, rabbits 765.

Flagellin,

- Pseudomonas* isolation, characterization 11.

Flammulina velutipes,

- fruit bodies production, inoculation, wood 7846.
- phosphoric diester hydrolases, purification 5979.

Flavanones,

- Erythrina sigmoidea*, antibacterial agents, isolation, new records 1328.

Flavobacterium,

- biodegradation, 2-thiophenecarboxylic acid, reviews 7825.
- biosynthesis, phenylalanine, tyrosine 1701.
- dextranase, kinetics, relationship substrates molecular weight 8574.
- dextranase, purification, characterization 2615.
- heparin lyase, immobilization, use, heparin removal blood 6865.
- interference membrane filtration, coliforms, drinking water 2391.
- monosodium methanearsonate, metabolism, conversion 1284.
- oil dispersants biodegradation, sea water 1876.
- proteolytic enzymes, dairy products isolates 1057.
- rhizoplane microorganisms, phosphorus, nitrogen, effects on, association Gramineae 6334.
- soil microorganisms, role, cellulose mineralization 4631.

Flavobacterium aminogenes,

- amino acids biosynthesis 3438.

Flavobacterium arborescens,

- xylose isomerase, purification, characterization 6850.

Flavobacterium farinoferrimentans,

- flavotoxin A, purification, characterization 8757.

Flavobacterium meningosepticum,

- prolyl endopeptidase, substrate specificity 16.

Flavodoxin,

- active centers, redox potential, N.M.R., *Megasphaera elsdenii* 7665.
- apoptins, purification methodology, *Azotobacter vinelandii* 5913.
- purification, characterization, adsorption use, chromatography, *Azotobacter vinelandii* 4260.
- viologen reduction, pulse radiolysis, *Megasphaera elsdenii* 858.

Flavomycin,

- antibiotic sensitivity testing, *Escherichia coli*, *Pseudomonas aeruginosa* 9215.
- residues, feces, inhibition methanogenesis, digestion (anaerobic) 8396.

Flavonoids,

- Salvia palaestina*, antibacterial activity, bacteria 4008.

Flavor,

- beer, fermentation, wort addition, yeasts 2691.
- beer, yeasts effects on 2683.
- meat, food contamination, *Cryptococcus laurentii* var. *laurentii*, association freezing 3702.
- phenyl carbonic acids, production, temperature effects on, wort fermentation, beer 2682.

ever compounds,

2,3-butanediol, acetoin, production, dairy industry, immobilized cells, Streptococcus lactis subsp. diacetylactis 6992.
2,3-butanedione, 2,3-pentanedione, biosynthesis, isoleucine-valine operon, cloning, gene regulation, Saccharomyces cerevisiae 7797.
production, dry meat products, role microorganisms 3700.
production, enzymes, microorganisms 200.
Saccharomyces cerevisiae sulfur volatiles, simulated beef, chemical composition, Saccharomyces cerevisiae 1046.
soybean milk, genetic engineering, nitrosoguanidine, mutagenesis, Lactobacillus casei subsp. alactosus 3701.

vorings,

antimicrobial activity 9143.
cream, Streptococcus lactis, dairy starters, milk, buffaloes 2736.
antiseptics,
antiseptics,
formation, U.V. radiation photoreduction, Alcaligenes, choline oxidase 891.
axolotl A,
purification, characterization, Flavobacterium farinoferrimentans 8757.
axolotl A,
antibiotic SQ 28,332, taxonomy, fermentation, structure, antibacterial activity 1448.
antibiotic SQ 28,502, antibiotic SQ 28,503, taxonomy, fermentation, biological properties 1450.

occupation,

activated sludge, characterization, bacteria 4119.
activated sludge, extracellular polymers extraction methodology, correlation 1482.
activity, role fermentation, spheroplasts membrane fusion, Saccharomyces diastolicus, Saccharomyces cerevisiae 8637.
bacteria, extracellular polymers production, activated sludge settlement, role, nutrient balance 2332.
bioreactors, ethanol production, Zymomonas mobilis 3638.
biotechnology, yeasts 2552.
concentration, phages, detection, drinking water 8413.
fermentation, Saccharomyces cerevisiae strains, homozygotes, cytoplasmic inheritance 5268.
ferric chloride, poliovirus 1 recovery, beef extracts 4990.
gene transfer, ethanol production, Saccharomyces cerevisiae 4406.
granular, deoxybutyrate, Pseudomonas 4929.
sedimentation, bulking, mathematical models, activated sludge 6687.

oiled areas,

slurries effects on, soil microorganisms, soil properties 2180.

oiled soils,

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

granular, deoxybutyrate, Pseudomonas 4929.

sedimentation, bulking, mathematical models, activated sludge 6687.

slurries effects on, soil microorganisms, soil properties 2180.

Abies fraseri, effects on root rot pathogenesis, Phytophthora cinnamomi 5610.

Fluorescence, (continued)

fatty acids, aflatoxins, analysis, thin-layer chromatography, high-pressure liquid chromatography, grain, Zea mays 8726.
lipid biosynthesis, fungi 1678.
lyso-phospholipase isoenzymes, penicillium notatum 7685.
measuring techniques, growth rate, Escherichia coli, batch culture 8475.
microscopy, Fusarium oxysporum f.sp. lini, soil, in situ 1267.
monitoring, methanogenic bacteria, digestion (anaerobic), waste treatment 4104.
Paracoccidioides brasiliensis viability determination methodology 2535.
pigments, production, Pseudomonas, media (selective) 7608.
polarization immunoassays, comparison, radioimmunoassay, serum levels, vancomycin, man 3116.
rubomycin analysis, DNA interaction 6066.
staining, monoclonal antibodies, methodology, cytomegalovirus, identification, tissue culture 8441.
staining, nuclei, fungi 5936.
staining, rhodamine, membrane potential, live bacteria 5025.
stains, microscopy, nuclear division, mitosis, Tulasnella aranosa 9330.
subtilisin, active sites serine residues, distance tryptophan residues, bacteria 899.
subtilisin inhibitor renaturation, denaturation kinetics, Streptomyces 901.
tryptophan, cysteine residues role, gene 32 protein binding DNA, phase T4 4259.
tryptophan residues, lysozyme, disaccharides tetrapeptides binding effects on, phase T4 7706.
U.V. radiation, Bacteroides identification 1617.
U.V. radiation, identification, Corynebacterium diphtheriae 5909.

Fluorescent antibody test,

Area catechu roots, Ganoderma lucidum infection detection methodology 7180.
comparison, enzyme-linked immunosorbent assay, characterization, immunity, varicella-zoster virus, man 636.
comparison, hemagglutination, diagnosis, syphilis, man 3317.
comparison, passive hemagglutination, serotyping, Campylobacter fetus ssp. jejuni 3293.
comparison, slides agglutination, Legionella clinical isolates identification 3301.
correlation, counter immunoelectrophoresis, rabies virus antibodies determination, rabbits 3250.
detection, Clostridium difficile, feces, methodology 2510.
drug release, respiratory syncytial virus, nasopharynx secretions 1556.
identification, influenza virus 9278.
immunodiagnosis, Corynebacterium sepeidonicum, plant diseases, books 3385.
immunodiagnosis, Rocky Mountain spotted fever 2471.
microscopy, detection, Mycobacterium leprae, leprosy 5904.
spring viremia of carp virus antigens detection, cyrines, Cyprinus carpio 5888.
use, identification, vesicular-arbovirus mycorrhizas 3360.

Fluorescent probes,

2-acetylaminofluorene, enhancement, methodology, cytomegalovirus (human), DNA, hybridization analysis 9282.
fluorescein diacetate, detection, live aquatic bacteria, fresh water 7534.
NAD⁺ analogs, photoaffinity labelling glyceraldhyde-phosphate dehydrogenase cysteine, yeasts 892.
Fluoridation,
dental caries, dental caries 8431.
dental caries epidemiology, British Isles, children 7555.
water treatment, dental caries prophylaxis, children 7552.
Fluoride,
binding cytochrome peroxidase, E.S.R., Pseudomonas aeruginosa 3469.
effects on, streptococcus mutans, growth, acid production, dental plaque 7554.
levels, drinking water, dental caries incidence, children 6728.
Medicago sativa treatment, nitrogen fixation, leghemoglobin, nodulation, biomass 2961.
nitrification inhibition, mathematical models 2358.
release equipment, oral cavity, dental caries prophylaxis, animal models 6725.
solubilization, soil pollution decontamination, Penicillium, Fusarium culmorum, Fusarium merismoides 7258.

Fluorine,

compounds, plastics, industrial effluents, wastewater treatment 4898.
drinking water, prophylaxis, dental caries, man, France 5868.
soil pollution, soil microorganisms, biological activity 413.

5-Fluoro-(2'-nitrofuril)-2-benzimidazole,

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

antifungal activity, antibacterial activity, Candida albicans, Bacillus subtilis

Foliar applications, (continued)

- Vigna unguiculata* 3903.
- fungicides, prophylaxis, disease control, plant diseases, *Glycine max*, USA, Georgia 8118.
- metalaixyl, elosite-Al, disease control, downy mildew, *Peronosclerospora sorghi*, *Sorghum bicolor*, Zea mays 8126.
- metribuzin, effects on *Solanum tuberosum* yield, association, infection, potato virus X, potato virus Y, potato leaf roll virus 8019.
- micronutrients, fungicides, effects on *Exserohilum rostratum* leafspot, *Chrysoidocarpus lutescens* 3910.
- ribavirin, effects on infection, *Prunus necrotic ringspot virus*, green ring mottle virus-like particles, *Prunus* 3902.
- spores persistence, biological control, *Bacillus thuringiensis*, *Gossypium* 117.

Foliar diseases

- phytopathogenic fungi, *Leguminosae* 6237.
 - phytopathogenic fungi, seasonal variations, *Vitis vinifera* 8016.
- Follic acid,**
- biosynthesis pathway inhibitors, drug resistance, bacteria, reviews 9053.

Folliculitis

- Pseudomonas aeruginosa*, spas, baths, case reports, man 7530.

Folpet,

- +cyproflum, *Phytophthora infestans*, *Pseudoperonospora cubensis*, disease control, *Solanum tuberosum*, *Cucumis sativus* 2894.
- disease control, *Phytophthora cactorum* fruit rot, *Botrytis cinerea* grey mold, *Fraxiparia chiloensis* 7214.

Fomannoxin,

- production, *Fomes annosus* 5392.

Fomes annosus,

- cellobiose dehydrogenase, purification, characterization 5976.
- disease resistance, antifungal agents, wood, *Pinus densiflora* 354.
- phytoalexin production 5392.
- protoplasts, enzymes, biodegradation, lignin 8673.
- root rot, *Pinus* leaves chemical composition association 2116.
- white rot, lignocelluloses biodegradation 5309.

Fomes fraxinophilus,

- infection, *Fraxinus pennsylvanica*, incidence, USA, Nebraska 5592.

Fonsecas pedrosi

- pathogens, isolation, feeds, storage buildings 582.

Food,

- antioxidants, butylated hydroxyanisole, butylated hydroxytoluene, antimicrobial activity, reviews 8717.
- Bacillus*, *Clostridium*, spore germination, inactivation, acids, reviews 7026.
- by-products, food processing, enzymes 5319.
- Campylobacter jejuni, contamination 6195.
- Campylobacter jejuni isolation, media (enrichment) 6958.
- cereals, mycotoxins food contamination, methodology 225.
- contamination, aflatoxins, bibliographies 5379.
- contamination, *Fusarium*, mycotoxins, reviews 7102.
- contamination, mycotoxins, detection, thin-layer chromatography 5366.
- contamination, *Salmonella*, characterization 6971.
- detection, aflatoxin B1, aflatoxin G1, screening methodology, Egypt 7064.
- drying, solar radiation, use methanogenesis, digestion (anaerobic), food processing, industrial wastes 7489.
- enumeration, molds, methodology, characterization 195.
- enumeration, *Staphylococcus aureus*, membrane filtration, enzyme immunoassay, methodology 6968.
- Escherichia coli* detection, bioassays 7844.
- fermentation, biotechnology, books, microorganisms 5941.
- gram-negative bacteria isolation, drug resistance, Mexico 437.
- man, aflatoxins detection, Zaire 7057.
- man, detection aflatoxins, India 7051.
- man, isolation *Aspergillus*, aflatoxins biosynthesis in vitro, Egypt 7062.
- microorganisms, bioassays, methodology, books 9336.
- microwave radiation sterilization, laminar air flow nosocomial environments, man 574.
- most probable number, enumeration, *Escherichia coli* 3690.
- phosphate, antimicrobial activity, reviews 6981.
- preservation, ionizing radiation, reviews 8714.
- preservatives 1073.
- preservatives, lyszyme characterization, *Streptomyces rutgersensis* 6006.
- Pseudomonas aeruginosa* isolation, hospitals, kitchens 5347.
- relationship, bacteria, resistance, carbon dioxide 1923.
- sodium chloride, antibacterial activity, reviews 7024.
- spices, *Salvia officinalis*, antibacterial activity 8719.
- Staphylococcus aureus* enterotoxin A, radioimmunoassay 1942.
- sterilization, food contamination, food spoilage, production, books 4240.
- ultrahigh temperature sterilization, reviews 7032.

Food additives,

- erythromycin, antibacterial activity, *Clostridium perfringens*, chickens 1065.

Food chains,

- role, microorganisms, books 4238.

Food consumption,

- seafood, hepatitis A outbreaks, man 3691.

Food contamination,

- aflatoxicosis association, man, domestic animals, reviews, historical account 7046.
- aflatoxin B1 assays, high-performance liquid chromatography 7044.
- aflatoxin M1, cow's milk 7892.
- aflatoxins, analysis, thin-layer chromatography, comparison, liquid chromatography, peanuts 8731.
- aflatoxins, chemical analyses, extraction, thin-layer chromatography, nuts, grain 7108.
- aflatoxins, coconuts, products, incidence, India 7894.
- aflatoxins, corn, control, reviews 222.
- aflatoxins, determination, liquid chromatography, peanuts 8729.
- aflatoxins, effects on proteins nutritive value, chickens 5352.
- aflatoxins, peanuts meals, corn meals, detection methodology, comparison 7066.
- aflatoxins, peanuts meals, decontamination methodology use methylamine+calcium hydroxide 7097.
- aflatoxins, production, grain, comparison, Zea mays, reviews 7052.
- aflatoxins, reviews, historical account 7049.
- Aspergillus*, *Fusarium*, *Chaetomium* mycotoxins, man, books 6798.
- Aspergillus parasiticus* aflatoxins, Zea mays, *Phaseolus*, detection, use, chromatography methodology 7088.
- Bacillus cereus*, Thailand 6970.
- bacteria, counting methods, glucose metabolism 6177.

Food contamination, (continued)

- bacteria, meat products quality, amines detection 6196.
 - bacteria survival, γ radiation treatment 7031.
 - bacteria, tomatoes, food processing effects on 6984.
 - books 4240.
 - cheese, *Penicillium*, mycotoxins detection, identification 7080.
 - chlorine dioxide antibacterial activity, food processing, off flavor, bacteria 7020.
 - corn, molds, toxins production, water content, temperature, propionic acid, effects on 2749.
 - corn, trichothecenes, screening use *Tetrahymena pyriformis* 7055.
 - Cryptococcus laurentii* var. *laurentii*, meat, effects on flavor, association freezing 3702.
 - 4-deoxyxynanol effects on body weight, food conversion, *Salmo gairdneri* 219.
 - eggs, aflatoxin B1, aflatoxin M1, aflatoxicol, determination, liquid chromatography 8732.
 - enzyme-linked immunosorbent assay, enterotoxins, *Staphylococcus* 8737.
 - fermented milk products, mycotoxins, risk factors 7106.
 - food processing hygiene, organoleptic evaluation, cheese 8709.
 - fungi, mycotoxins, books 3384.
 - Gossypium hirsutum* seeds meals, aflatoxins, detoxification methodology 7081.
 - ham, yeasts, bacteria, potassium sorbate, vacuum packaging, effects on food spoilage 3730.
 - lactic acid bacteria, meat, meat products, reviews 209.
 - meat, molds, growth conditions 6193.
 - microorganisms, books 3368.
 - microorganisms, books, conferences 4246.
 - milk, *Yersinia enterocolitica* 7004.
 - minced meat, bacteria 203.
 - molds, chickens feeds, ingestion effects on body weight 7014.
 - mycotoxins, animals feeds, screening methodology, British Isles 7047.
 - mycotoxins, association cereals grain quality 226.
 - mycotoxins, cereals food, cereals grain, methodology 225.
 - mycotoxins, decontamination methodology, reviews 7073.
 - mycotoxins, detection, use, antibodies association, reviews 7082.
 - mycotoxins, detoxification 7893.
 - mycotoxins, man, animals, screening methodology, reviews 7079.
 - mycotoxins, mycotoxins association, man, animals, books, conferences 7647.
 - mycotoxins, screening, prevention, control association food processing, reviews 7070.
 - mycotoxins, Zea mays, intoxication, cattle 6205.
 - niavalenol, vomitoxin, *Fusarium graminearum*, levels, flour, *Hordeum vulgare* 2737.
 - ochratoxin A, reviews 7060.
 - poultry, *Campylobacter fetus* subsp. *jejuni* 1058.
 - Prunus amygdalis*, nuts, *Aspergillus flavus* aflatoxins levels 7101.
 - Pseudomonas*, chickens, volatiles production 5317.
 - psychotropic bacteria, pork 6966.
 - Salmonella* detection, DNA hybridization analysis 673.
 - Salmonella*, enzyme immunoassay detection 8478.
 - seafood, yeasts 5343.
 - seafood, yeasts, proteolytic enzymes, lipolysis 5340.
 - Staphylococcus aureus* enumeration methodology, fibrinogen agar media 6183.
 - Staphylococcus enterotoxins*, detection, passive reverse hemagglutination 7905.
 - trichothecenes, gas chromatography, grain, *Hordeum vulgare* 7107.
 - viruses, U-3R 202.
 - wheat, mycotoxins 7098.
 - yeasts, bacteria, seafood, *Pisces* 8712.
 - Yersinia enterocolitica*, enterotoxins production 8753.
- Food dye,**
- pigments production, immobilized cells, *Monascus* 5238.
- Food industry,**
- antimicrobial agents, inhibition, bacteria spores 7028.
 - bacteria spores, heat resistance, mechanisms 6415.
 - brewing, baking, by-products, extracts, *Saccharomyces cerevisiae* 201.
 - chlorine disinfection, spores, resistance, *Bacillus*, *Clostridium* 6413.
 - color compounds, flavor compounds, production, enzymes, microorganisms 200.
 - enzymes, thermal stability, genetic engineering, thermophilic microorganisms 3495.
 - food processing industrial wastes, composting, thermophilic fungi survival 4114.
 - glucose oxidase, fungi 55.
 - hydrogen peroxide, bacteria spores, resistance 6414.
 - immobilized enzymes, reviews 5139.
 - industrial effluents, wastewater treatment, digestion (anaerobic), methanogenesis 8405.
 - industrial effluents, wastewater treatment, potatoes, fermentation 2350.
 - industrial effluents, wastewater treatment, trickling filters, activated sludge 4111.
 - industrial wastes, single-cell protein, production, amino acid composition, *Fusarium* odo 1729.
 - pectinolytic enzymes applications, reviews, microorganisms 2598.
 - safety regulations, enzymes 43.
 - safety regulations, toxicity testing, enzymes, microorganisms 44.
 - Salmonella* carriers, man 8427.
 - spores, heat resistance, bacteria 7030.
 - starch hydrolysis, α -amylase, microorganisms 51.
 - starch residues, fermentation, single-cell protein production, *Aspergillus*, *Rhizopus*, *Penicillium* 1713.
 - triacylglycerol lipase, extracellular enzymes, reviews, microorganisms 2600.
- Food poisoning,**
- botulism, seafood 4486.
 - mycotoxicosis, *Fusarium*, domestic animals, reviews 7017.
 - role meat, spoilage, bacteria 3713.
- Food preferences,**
- saprophy, fungi decomposition, *Pinus*, leaves, *Porcellio scaber* 2912.
- Food processing,**
- alkaline industrial wastes, wastewater treatment, Zea mays 8402.
 - association, control, mycotoxins food contamination, reviews 7070.
 - bacon, ham, spoilage 3709.
 - briars, fishery products, single-cell protein production, *Candida utilis* 6812.
 - by-products, waste treatment, microorganisms 5320.
 - corn, industrial effluents, wastewater treatment, methanogenesis, bioreactors 7510.
 - decontamination, mycotoxins food contamination, methodology, reviews 7073.
 - food by-products, enzymes 5319.
 - food contamination, vomitoxin, flour 3737.
 - hygiene, food contamination, organoleptic evaluation, cheese 8709.

Food processing, (continued)

- industrial wastes, biotechnology, books 4233.
 industrial wastes, composting, thermophilic fungi survival 4114.
 industrial wastes, digestion (anaerobic), methanogenesis, volatiles fatty acids 5704.
 industrial wastes, digestion (anaerobic), methanogenesis, use food drying, solar radiation 7489.
 industrial wastes, growth conditions, kinetics, optimization, *Candida utilis* 9225.
 industrial wastes, waste treatment, composting 6682.
 meat industry, bacteria contamination 3706.
 meat industry, poultry, bacteria contamination, hygiene 3707.
 meat industry, poultry, *Staphylococcus aureus* contamination, biotyping 6179.
 meat products, cured products, spoilage, contamination, bacteria 3708.
 molds detection, colorimetry methodology 6185.
 olives, wastes, fungi biodegradation, proteins production 871.
 oranges, industrial wastes, digestion (anaerobic) 6699.
 potatoes, waste water, use, fermentation, *Saccharomycopsis fibuligera*, *Candida utilis*, biomass 157.
 poultry, food contamination, chlorine dioxide, antibacterial activity, off flavor 7020.
 tomatoes, effects on food contamination, bacteria 6984.
 wastes, astaxanthin extraction, silage, *Procambarus clarkii* 2714.
 wastes, methanogenesis, bioreactors, *Coffea arabica* 7515.
 wastes, methanogenesis, digestion (anaerobic), *Beta vulgaris* 6691.
 wheat, flour, effects on vomitoxin levels 7890.

Food sources,

- fruit bodies, *Discomycetes*, *Gasteromycetes*, India 6192.
Food spoilage,
 books 4240.

- harm, food contamination, bacteria, yeasts, potassium sorbate, vacuum packaging, effects on 3730.

Food-borne diseases,

- bacteria classification, reviews 1896.
 books 4240.
 viruses, prophylaxis, hand disinfection, man 9266.

Food-end-mouth disease virus,

- capsid protein, isolation, chromatofocusing, methodology 656.
 plaque characterization, vaccines production 3183.
 storage, proteolytic enzymes activity 6741.
 synthetic peptides, vaccines production, antigenicity, cattle 6659.
 typing, complement fixation methodology 3254.
 ultracentrifugation, density gradients, cesium chloride 6736.
 vaccines, overproduction, DNA recombination products, reviews 5810.
 vaccines, production, formaldehyde, inactivation 5809.

Fore,

- indigenous species, introduced species, nitrogen fixation, rangelands soil 7271.
Forest floor,
 leaf litter, decomposition, interspecific relationships, invertebrates, forest floor 7222.

- soil horizons, seasonal variations, ascospores, fungi 5540.

- soil microorganisms, role, survival, *Fusarium* 5539.

- sulfur dioxide, pollution effects, soil microorganisms 5613.

- taiga, nutrient cycles, USA, Alaska 5545.

Forest management,

- root rot, Dutch elm disease, disease control, Canada 2922.

Forest products,

- burning, effects on nutrient cycles, soil microorganisms, forest floor, *Pinus ponderosa* forests 8932.

- clear cutting, burning, effects on ectomycorrhizas association, *Pseudotsuga menziesii* 7231.

Forest products,

- Acer saccharum*, defects, association, canker, *Eutypella parasitica* 8180.

- adhesives, biodegradation, fungi 7241.

- biodegradation, association, water potential, fungi 1242.

- biodegradation, bacteria, fungi, colonization, succession, preservatives, effects on 1241.

- biodegradation, fungi, bacteria, control, books, conferences 1697.

- colonization, biodegradation, microorganisms, relationship, catalase activity, caseate, effects on 1243.

- preservation, biodegradation 1250.

- preservation, biodegradation, fungi, Switzerland 1249.

- softwoods, protection, biodegradation, fungi, Canada 1248.

Forest products,

- sores colonization, mathematical models, ectomycorrhizas 5577.

- trees, ectomycorrhizas, research programs 5550.

Forest products,

- Abies balsamea*, *Bacillus thuringiensis*, biological control, *Choristoneura fumiferana* 7778.

- carbon cycle, soil microorganisms, soil nutrients 6321.

- ethylene production, ascospores, *Elaphomyces*, Sweden 351.

- Fagus sylvatica*, *Quercus petraea*, litter fall decomposition, British Isles 352.

- fertilization effects on bacteria, soil, catchment areas, surface water 2106.

- fires, burning, effects on soil microorganisms 7221.

- leaf litter decomposition, Canada 8933.

- litter, effects on mycorrhizas growth, seedlings, *Pseudotsuga menziesii*, Thuja plicata 5546.

- litter, wood, biodegradation, microorganisms 5537.

- litter, mineralization, fertilizer applications, *Pinus radiata* 5541.

- Nothofagus dombeyi*, fungi, species composition 3906.

- phosphorus cycle, biogeochemistry 5536.

- Picea*, humus, thiosulphate sulphurtransferase, soil microorganisms 2916.

- Picea sitchensis*, soil, vertical distribution, *Mycena galopus*, *Marasmius androsaceus*, *Onychium latius* grazing effects on 8939.

- Pinus radiata*, soil myc flora, population levels, relationship *Aphelenchus avenae* 8223.

- primary production, soil, population levels, mycorrhizas 5553.

- Pseudotsuga menziesii*, fungi, biomass, hyphae 1232.

- soil, bacteria enumeration, environmental factors effects on 1231.

- soil, formation, ectomycorrhizas, vesicular-arbuscular mycorrhizas, rhizosphere temperature effects on 5549.

Forests, (continued)

- soil, labcult 25 treatment, actinomycetes enumeration 4674.
 soil, litter, acetylene reduction, nitrogen-fixing bacteria, *Eucalyptus obliqua*, *Pinus radiata* 8937.
 soil microorganisms, decomposition, wood, urea fertilization effects on 5578.
 soil microorganisms geographical distribution, USA, Arizona 7246.
 soil microorganisms, nitrogen cycle, mathematical models 8146.
 soil microorganisms, sulfur, nutrient cycles 4611.
 soil moisture, drying, effects on denitrification 8938.
 soil, organic matter, association, mineralization, carbon, nitrogen 8145.
 soil, organic matter, nitrogen mineralization 7290.
 soils, sulfur organic compounds formation, soil microorganisms 5617.
 sulfur mineralization, soil microorganisms 1230.
 tropical environment, vesicular-arbuscular mycorrhizas, mycelia, nutrient uptake 5576.
Tsuga heterophylla, epidemiology, airspora, basidiospores deposition, *Heterobasidion annosum* 8944.
 tundra, transitions, alpine environments, ecological distribution, ectomycorrhizas 2101.

L form,

- bacteria, artificial symbiosis, plants 6345.
Staphylococcus aureus, growth, pipemidic acid antibacterial activity 9097.

M form,

- Pseudomonas aeruginosa*, defective mutant, alginate role, lipase stimulation 2570.

Formaldehyde,

- antibacterial activity, noxythiolin release mechanisms 2216.

- antifungal activity, fungi 4962.

- disinfection, antigens extracts, fungi, pathogens, clinical microbiology 810.

- inactivation, foot-and-mouth disease virus, vaccines, production 5809.

- industrial effluents, toxicity, methanogenic bacteria, digestion (anaerobic) 1483.

- oxidation, methanogenesis, methanogenic bacteria 4681.

- Formaldehyde dehydrogenase (glutathione)**
 purification, characterization, *Pichia pastoris* 1782.

Formalin,

- comparison, heat treatments, *Legionella pneumophila*, antigens, use, indirect fluorescent antibody test 792.

Formate dehydrogenase,

- activity, dehydrocholic acid reduction, 12-ketochonodeoxycholic acid synthesis, NADH regeneration 6090.

- Candida boidinii*, +*Bacillus sphaericus* leucine dehydrogenase, L-leucine production, membranes reactors 3.

- Clostridium pasteurianum*, purification, characterization 6859.

- purification, *Candida boidinii* 61.

- purification, characterization, methanol oxidation, *Pichia pastoris* 2614.

- purification, ultrafiltration, ion exchange 7733.

Formazans,

- antibacterial activity, *Bacillus subtilis*, *Staphylococcus aureus*, *Salmonella typhi*, antiviral activity, sunhemp rosette virus 9139.

Formic acid,

- antimicrobial activity, microorganisms, effects on, hay, preservation 6490.

- metabolism, methanogenic bacteria coenzyme M biosynthesis 6825.

N-Formimidoyl thienamycin,

- antibacterial activity, antibiotic synergism, streptomycin, amikacin, sisomicin, *Streptococcus faecalis*, *Streptococcus faecium* 4811.

- antibacterial activity comparison, cefoperazone, *Pseudomonas aeruginosa* 508.

- binding affinity, β -lactamase 4275.

Formycin,

- foliar applications, effects on cowpea chlorotic mottle virus infectivity, symptoms, *Vigna unguiculata* 3903.

Formycin B,

- analogs, pyrazolo[4,3-d]pyrimidine nucleosides, antiviral activity 9118.

5-Formylmellein,

- metabolites, *Mummularia* 5246.

7-Formylmellein,

- metabolites, *Mummularia* 5246.

Formyltetrahydrofolate synthetase,

- Clostridium adijirici*, antigenic characteristics, cross-reactivity, structure, tetrahydrofolate synthase, yeasts 8590.

Fortimicin A,

- disc-diffusion test, bacteria 531.

Fosamine ammonium,

- toxicity, biodegradation, soil microorganisms 2175.

Fostomycin,

- antibacterial activity, *Staphylococcus aureus* 7422.

- antibiotic sensitivity testing, *Eikenella corrodens* 4793.

- bacteria sensitivity standardization, agar diffusion test 537.

Fouling,

- Cephalosporium cornuoides*, acetone recovery systems 7525.

- Mycobacterium cell adhesion kinetics, reverse osmosis membranes, wastewater treatment 2383.

Fouling organisms,

- bacteria, species composition, marine environment 1040.

- biodegradation, fungi, bacteria, control, oil, books, conferences 1697.

- Pseudomonas fluorescens*, films *Pseudomonas fluorescens*, aluminum reactors, liquids 2382.

Fowl cholera,

- vaccination, antibody response, enzyme-linked immunosorbent assay, indirect hemagglutination, chickens 3343.

Fowl plague virus,

- antiviral activity, tetrahydro-2(1H)-pyrimidinone derivatives, structure-activity relationships 8321.

- purification methodology, use, enzyme-linked immunosorbent assay 6751.

Frageria,

- anthracnose, fruit rot, *Glomerella cingulata*, USA, Florida 8047.

- ectomycorrhizas effects on growth, association, clays media 2136.

- Phytophthora fragariae infection, disease control, use, fumigation, comparison, fungicides drenches 1182.

- plant diseases, fungi, viruses, books 1687.

Frageria chiloensis,

- fungicides, disease control, *Phytophthora cactorum* fruit rot, *Botrytis cinerea* grey mold 7214.

Frageria vesca,

- red core, *Phytophthora fragariae*, vesicular-arbuscular mycorrhizas protection 5448.

Fragaria vesca, (continued)

seed-borne diseases, disease transmission, tobacco streak virus 6267.

France,

drinking water, fluorine, prophylaxis, dental caries, man 5868.

Francisella tularensis,

immunoglobulins, detection, enzyme-linked immunosorbent assay methodology, man 2468.

β -lactamase, purification, characterization 1814.

Frankfurt, Germany,

Clostridium botulinum growth, toxins production, inhibition, sodium nitrite,

+potassium sorbate, +sodium acid pyrophosphate 7021.

Frankia,

actinorrhizas, *Alnus glutinosa*, nitrogen fixation 4593.

actinorrhizas, *Alnus glutinosa* roots 2096.

actinorrhizas, *Alnus incana*, nitrogenase activity 4609.

actinorrhizas, *Alnus incana* subsp. *turgida*, characterization 4598.

actinorrhizas, *Alnus*, nitrogen fixation, conferences 5100.

actinorrhizas, *Alnus rubra*, *Cytisus scoparius*, nutrient uptake, silviculture,

Pseudotsuga menziesii 8159.

actinorrhizas, *Alnus rubra*, root hairs 4599.

actinorrhizas, aromatic compounds effects on 4595.

actinorrhizas, biotyping, nodulation, *Alnus glutinosa* 8157.

actinorrhizas, *Casuarina* 4306.

actinorrhizas, *Casuarina*, histochemistry 4604.

actinorrhizas, hyphae morphology, biotyping, nodulation, *Alnus nitida* 8158.

actinorrhizas, inoculation, stimulation growth, *Alnus* 8160.

actinorrhizas, nitrogen fixation, *Alnus*, conferences 8499.

actinorrhizas, nitrogen fixation, interaction vesicular-arbuscular mycorrhizas,

phosphate nutrient uptake, *Hippophae rhamnoides* 8243.

actinorrhizas, nitrogenase, acetylene reduction, seasonal variations,

relationship reproductive organs growth, *Alnus glutinosa* 8155.

actinorrhizas, nitrogenase, nitrogen fixation, hydroponics, silviculture,

nutrient requirements, *Alnus incana* 8152.

actinorrhizas, nitrogenase, nitrogen fixation, measuring techniques, acetylene

reduction, nodules, *Alnus incana* 8153.

actinorrhizas, nodulation, inoculation, agroforestry, *Casuarina* 8149.

actinorrhizas, nodulation, inoculation, propagation, seedlings, *Alnus crispa*

8154.

actinorrhizas, nodules ultrastructure, *Dryas drummondii*, *Rubus ellipticus* 8150.

actinorrhizas, plants infectivity, herbicides effects on 2123.

actinorrhizas, plants, lectins binding 4602.

DNA, nodules, *Alnus glutinosa*, isolation, purification 4370.

hemoglobin levels, energy metabolism, nitrogenase, nodules, *Myrica gale* 2898.

isolation, nodules, *Casuarina* 4597.

media (isolation), actinorrhizas 8471.

nitrogen fixation, *Alnus glutinosa*, *Hippophae rhamnoides*, *Datisca cannabina* 4594.

nitrogen fixation, *Juglans*, allelopathy 3959.

nitrogenase activity, *Alnus rubra* roots nodules 6318.

nodulation, *Alnus glutinosa* plantlets 4601.

nodulation, *Alnus incana*, nitrogen fixation 4610.

nodulation, *Myrica gale* 4603.

nodules, *Alnus rubra*, oxygen effects on nitrogenase activity 4606.

nodules, *Myrica gale*, nitrogenase activity, seasonal variations 4607.

+*Pseudomonas cepacia*, *Alnus rubra* nodulation 4600.

symbiosis, *Alnus nepalensis*, nitrogen fixation, seasonal variations 6320.

ultrastructure, nitrogenase, nitrogen fixation, actinorrhizas, *Alnus nitida*,

Colletia cruciata, *Datisca* 2969.

Fraxinella,

aniline biodegradation 6162.

Fraxinus americana,

dieback, tobacco mosaic virus, tobacco ringspot virus, detection, enzyme-linked

immunosorbent assay 8951.

growth, fertilization-vesicular-arbuscular mycorrhizas inoculation, *Glomus*

fraxinellus 7229.

seedlings, growth, vesicular-arbuscular mycorrhizas inoculation effects on 5548.

Fraxinus mariesii,

tobamovirus infection, characterization 1238.

Fraxinus pennsylvanica,

Fomes *fraxinophilus* infection, incidence, USA, Nebraska 5592.

Phellinus punctatus incidence, USA, North Dakota 3838.

Free radicals,

chemical malification, tryptophan, cysteine residues, role, gene 32 protein

binding DNA, C.D., fluorescence, phage T4 4259.

superoxide, caffeic acid, inhibition, *Pyncularia oryzae*, spore germination, role

disease resistance, plant diseases 8889.

superoxide, hydroxide, non-steroidal antiinflammatory drugs, inactivation, phage

T2 4769.

Freeze drying,

cell culture, microorganisms 4146.

Lactobacillus bulgaricus survival, calcium effects on 4457.

preservatives, effects on microorganisms growth, urine culture 3268.

Staphylococcus aureus survival, factor affecting, minced meat 7037.

Leuconostoc oenos, cattle bile resistance, effects on viability, malolactic

fermentation, wine 6125.

Escherichia,

Escherichia coli injuries, antibiotics sensitivity, cell surface hydrophobicity

2241.

soil microorganisms, in situ effects on, *Pseudomonas paucimobilis*, *Acanthamoeba*

polyphaga 4638.

storage effects on spoilage, *Staphylococcus aureus*, *Salmonella hadar*, *Salmonella*

typhimurium, beef, poultry 6975.

Freezing,

Acholeplasma laidlawii, association electron microscopy, methanol, acetone, use,

extraction, lipids 9314.

dairy starters, viability, *Streptococcus cremoris* 4450.

effects on aroma, *Tricholoma aestivum*, *Xerocomus badius* 7856.

Lactobacillus bulgaricus survival, calcium effects on 4457.

meat, bacteria enumeration methodology 1060.

meat, food contamination, *Cryptococcus laurentii* var. *laurentii*, flavor

association 3702.

molongo, pork+plantains, *Staphylococcus aureus* survival 7859.

samples, scanning electron microscopy, fungi 8487.

steam pasteurization, spoilage, *Clostridium botulinum* type E toxins production,

seafood, *Crassostrea virginica* 5364.

Fresh water,

live aquatic bacteria detection, fluorescent probes, fluorescein diacetate 7534.

media (isolation), *Serratia* 7536.

pollution effects, *Bacillus thuringiensis*, *Bacillus sphaericus*, toxicity,

biological control, larvae, *Culex quinquefasciatus*, *Aedes aegypti* 2658.

starvation, survival, nutrient availability, bacteria, soil isolates, clinical

isolates, lakes 9224.

Freshwater environments,

fungi, biodegradation, detergents 1037.

Freshwater microorganisms,

quaternary ammonium compounds, surfactants, biodegradation 5311.

Frost,

ice nucleation bacteria, plants 4556.

Frozen food,

enumeration, *Escherichia coli*, methodology 6181.

isolation, *Campylobacter jejuni*, growth, media (selective) 8704.

Frozen products,

oranges juices, microorganisms enumeration 7850.

 β -D-Fructofuranosidase,

activity, clays, soil properties, grasslands 403.

activity, measuring techniques, vertical distribution, soil 6333.

hydrolysis, polysaccharides, crop residues, *Beta vulgaris* 8674.

immobilization, coupling, *Zea mays* crop residues 8551.

immobilization, yeasts 4333.

immobilized enzymes, activity, stability, *Saccharomyces cerevisiae* 1770.

physicochemical properties, *Puccinia coronata*, crown rust, leaves, *Avena sativa*

2109.

sucrose hydrolysis, kinetics, pH, temperature effects on, soil 6332.

viscosity effects on sucrose hydrolysis, *Saccharomyces cerevisiae* 8535.

Fructose,

concentration, effects on, *Zymomonas mobilis*, ethanol, production 996.

fermentation, ethanol production, *Zymomonas mobilis* 6929.

fermentation, sensors 3530.

Fusarium oxysporum fermentation 1860.

glucose isomerization, bioreactors 8534.

production, suppressor mutant, inulinase, *Pichia polymorpha* 3526.

production, inulin hydrolysis, inulinase, immobilized enzymes, *Kluyveromyces*

fragilis 8548.

substrates, *Zymomonas mobilis*, ethanol production, factors affecting, kinetics

148.

Fructose-bisphosphatase,

subunits, molecular weight, *Saccharomyces cerevisiae* 5130.

Fructosyltransferase,

Streptococcus anguis, biosynthesis 943.

Fruit bodies,

Aphyllales, *Abies pinsapo* rot 5611.

Basidiomycetes, extracts, antifungal activity 9201.

cellulase, β -D-glucosidase, purification, characterization, *Termitomyces*

6844.

Discomycetes, Gasteromycetes, food sources, India 6192.

ectomycorrhizas, basidiomycetes, inoculum, colonization, seedlings, *Betula pendula*

5559.

formation, *Suillus luteus*, environmental factors, plantations, *Pinus radiata*

5571.

Grifola frondosa, glucans, isolation, antitumor activity, sarcoma 180, mice 6891.

production, culture, lentivirus, Phoridae, Scaridae, Nematoda, Basidiomycetes

7854.

production, culture, *Lenistius edodes*, *Pleurotus cystidiosus* 8695.

production, culture, pest control, Basidiomycetes 7855.

production, culture, *Pleurotus pulmonarius*, *Pleurotus columbinus*, *Pleurotus*

ostreatus 8697.

production, culture, volatiles fumes effects on, Basidiomycetes 7845.

production, wood inoculation, Basidiomycetes 7846.

ribonuclease, purification, characterization, *Lenistius edodes* 1764.

Sapindus mukorossi, saponins isolation, characterization 8627.

spatial distribution, ectomycorrhizas, spreading, succession, *Betula pubescens*

5557.

yield, Basidiomycetes culture, compost 1680.

Fruit juices,

apples, patulin detection, screening methodology, gas chromatography 7096.

limonin levels, bitterness reduction, immobilized cells *Arthrobacter globiformis*

5338.

Fruit rot,

Alternaria, *Malus pumila* 7986.

Alternaria, *Prunus*, disease control, fungicides, new records 339.

anthracnose, *Glomerella cingulata*, USA, Florida, *Fragaria* 8047.

Aspergillus aculeatus, *Rhizoctonia* 8443.

Botryodiplodia theobromae, disease control, *Citrus reticulata* 5525.

Cucumis sativus, *Didymella bryoniae* ascospores incidence 278.

grey mold, *Botrytis cinerea*, disease control, fungicides, *Fragaria chiloensis*

7214.

pathogenicity, *Diplodia*, *Botryodiplodia*, *Lasiodiplodia* 7162.

post-harvest decay, fungi 8676.

post-harvest decay, oranges, *Aspergillus aculeatus*, *Botryodiplodia theobromae*,

cellulase association 2049.

Fruit trees,

crown gall, biological control 269.

crown gall, biological control, *Agrobacterium radiobacter*, reviews 333.

crown gall, British Isles 268.

crown gall, Italy 267.

Japan, viruses identification 3811.

plant viruses, books, conferences 3400.

Pseudomonas syringae, ice nucleation activity, pathogenicity 2804.

roots, colonization, vesicular-arbuscular mycorrhizas 5619.

Frutites,

Glycine max, nitrogen fixation, *Rhizobium japonicum* 2154.

Fruits,

brown rot, post-harvest decay, *Monilinia fructicola*, biological control, *Bacillus*

subtilis 8053.

chemical composition, relationship *Botryosphaeria ribis*, infection

susceptibility, *Malus pumila* 2759.

chemical composition, watermelon mosaic virus effects on, *Cucurbita maxima* 6257.

ethylene production, *Rhizopus stolonifer* infection effects on, *Lycopersicon*

esculentum 2011.

isolation, agar, yeasts 9331.

Malus pumila, susceptibility, *Venturia inaequalis* scab, role, age, temperature,

Fruits, (continued)

- water availability 2797.
 Penicillium digitatum post-harvest decay control, phosethyl AI treatment 2050.
 Persea gratissima, Colletotrichum gloeosporioides latent infection, nutrients substrates effects on 7987.
 Prunus persica, Rhizopus stolonifer, post-harvest decay, characterization 8878.
 Prunus persica nectar, Prunus persica, in vitro, in vivo, temperature effects on Monilia fructicola conidia spore germination, size, pathogenicity 7992.
 Punica granatum, Beltraniella humicola spot, new records 2002.
 ripening, antifungal compounds, Colletotrichum gloeosporioides infection, Persea americana 2000.

FTA-ABS test,

- Treponema, methodology, comparison 8463.

Fuchsia,

- development, vesicular-arbuscular mycorrhizas effects on 2811.

Fuels,

- biodegradation, heat treatments, control, Cladosporium resinae, Penicillium cryophilum, contamination 1296.
 biodegradation, Cladosporium resinae, benomyl, antifungal activity 1298.
 cells, bacteria, electron transport coupling, redox potential mediators 6099.
 cells, bacteria, electron transport coupling, redox potential mediators 6101.
 contamination, biodegradation, Cladosporium resinae, nutrient requirements 1306.
 ethanol, fermentation, cellulolytic enzymes, microorganisms 162.
 2-methoxyethanol, spoilage, Pseudomonas putida growth 3005.
 microorganisms biodegradation, books 1683.
 production, biotechnology, yeasts, fermentation, methodology, reviews 7803.
 production, fermentation, industrial wastes, paper mills, lignocelluloses hydrolysis, cellulolytic microorganisms 7781.
 production, metabolism, carbon monoxide, carbon dioxide, methanol, anaerobic bacteria 5312.
 production, use hydrocarbons, methane, metabolism, methylotrophic bacteria 5706.

Fulton,

- effects on Frankia, actinorrhizas, plants infectivity 2123.

Fumarate hydratase,

- activity, immobilized cells, Brevibacterium flavum 75.
 activity, L-malic acid production, Escherichia coli 6877.
 activity stability, Brevibacterium flavum immobilized cells 3443.
 fumaric acid conversion, L-malic acid production, immobilized cells, Thermus rubens sp.nov. 9.

Fumaric acid,

- conversion, L-malic acid production, fumarate hydratase, immobilized cells, Thermus rubens sp.nov. 9.
 conversion, succinic acid, Campylobacter, Clostridium, Streptococcus, detection, gas chromatography, methodology 794.
 esters, inhibition Clostridium botulinum, toxins formation, canned food, bacon 7034.

Fumes,

- toxicities, effects on fruit bodies production, culture, Basidiomycetes 7845.

Fungitoxin,

- comparison, fungicides drenches, disease control, Phytophthora fragariae infection, Fragaria 1182.
 effects on soil microorganisms, crop fields 5681.
 fungicides, use, soil sterilization, disease control, powdery mildew, Turkey 337.
 soil, effects on vesicular-arbuscular mycorrhizas 7298.
 soil, post-harvest decay, fungi interaction, competition, factors affecting 8050.

Fungal radiation,

- contamination, counting methods, bran 2052.
 Fagus sylvatica, association, natural pruning 2105.
 Glycine max seeds, detection, pH, water 289.
 post-harvest decay, ergosterol levels, indicators, corn, rice 2051.
 post-harvest decay, fungal interaction, competition, factors affecting 8050.
 post-harvest decay, Triticum aestivum 7196.
 Quercus robur 5609.
 Quercus robur branches 7218.

Fungemia,

- detection, blood culture samples volume 702.
 detection, liquid culture, aerobic conditions, anaerobic conditions, effects on 2514.
 detection, sucrose, liquid culture, man 2522.

Fungi,

- air spora, hospitals 5864.
 airborne microorganisms, sampling, measuring techniques, incidence, reviews 803.
 allergens, contamination, aflatoxin B1 3732.
 amphotericin B antibiotic sensitivity testing, radiometry 2280.
 α -amylase activity, measuring techniques 7719.
 α -amylase, desizing, fabrics, textile industry 52.
 α -amylase, starch hydrolysis, flour, baking industries 198.
 analysis, pharmaceuticals, syrups 4136.
 antagonism, Ascopillium lipoferum, Ascopillium brasiliense, role inoculum survival, soil 4658.
 antagonism, Massarina aquatica infection wood 2110.
 antibiotic sensitivity testing, drug sensitivity testing 8346.
 antibiotics biosynthesis, pH levels 2246.
 antibiotics production, association, morphology 2255.
 antibiotics production, fermentation, cheese production, industrial applications 9189.
 antifungal activity, alantolactone, isohelenin 5742.
 antifungal activity, formaldehyde, persteril 4962.
 antifungal agents, structure, resistance, antimicrobial activity, reviews 2234.
 antimicrobial activity, disinfectants, antiseptics, antimicrobial agents 9189.
 preservatives 5137.
 antimicrobial activity, flavorings 9143.
 antimicrobial agents, antibiotics, structure-activity relationships, reviews 9170.
 ascospores harvesting, Tuber melanosporum 3834.
 ascospores, seasonal variations, soil horizons, forest floor 5540.
 Aspergillus flavus, fluorescence, agriculture, aflatoxins, Zea mays, Gossypium hirsutum 4474.
 biodegradation, adhesives, forest products 7241.
 biodegradation, coniferyl alcohol 190.
 biodegradation, detergents, estuaries, freshwater environments 1037.
 biodegradation, leaf litter, pesticides effects on 2097.
 biodegradation, olives food processing wastes, proteins production 871.
 biodegradation, rubber polymers 3846.
 biodegradation, wood, soil, nitrogen, effects on 1244.

Fungi, (continued)

- biodegradation, bacteria, fouling organisms, control, oil, forest products, effluents, Gramineae, books, conferences 1897.
 biodegradation, biological properties, characterization 1021.
 biodegradation, buildings materials, preservatives, polyvinyl acetate 6394.
 biodegradation, corn, storage 1165.
 biodegradation, forest products, association, water potential 1242.
 biodegradation, forest products, colonization, succession, preservatives, effects on 1241.
 biodegradation, forest products, preservation, Switzerland 1249.
 biodegradation, leather, museums, Kuwait 1024.
 biodegradation, polyvinyl chloride, films 1032.
 biodegradation, postal stamps paper 3649.
 biodegradation, softwoods, forest products, protection, Canada 1248.
 biodegradation, standard reference materials 1028.
 biodegradation, wood carvings, anthropology 1023.
 biodegradation, wool, control, biocides 1288.
 biological control, Ceratocystis ulmi 6330.
 biological control, conferences, Aphididae 5944.
 biological control, decay fungi, Fagus sylvatica 5589.
 biological control, efficacy surveys, weeds 8650.
 biological control, Insecta 8639.
 biological control, Insecta, conferences 846.
 biological control, surveys, crop fields, British Isles, Aphididae 5233.
 biomass, composts, methodology 5684.
 biomass, hyphae, Pseudotsuga menziesii forests 1232.
 biomass, measuring techniques, glucose, wood products 6791.
 biomass, single-cell protein, production, peat hydrolysates, conferences 7645.
 biosynthesis, novobiocin, erythromycin, oleandomycin, lincomycin 2254.
 blood culture, comparison, liquid culture, isolation, methodology 3260.
 carbohydrates hydrolysis, fermentation criteria 3666.
 carbon compounds biodegradation, oxidation, reviews 7823.
 cell culture filtrates, tributyltin biodegradation 3648.
 cellulase, affinity chromatography 4302.
 cellulase production, screening projects 6883.
 cellulase, spoilage, calcium chloride prevention, pickles, fermented food 8699.
 cellulolytic enzymes activity 6871.
 cellulolytic microorganisms, fermentation 1004.
 cellulolytic microorganisms, single-cell protein production, cellulose fermentation, crop residues 3726.
 chemical analysis, lasers, methodology 4226.
 chitin biosynthesis, wood decay, polyoxin effects on 3647.
 chitin, reviews, biotechnology 5201.
 clinical isolates
 1-(4-chlorophenoxy)-3,3-dimethyl-2-(1,2,4,2,4-triazole-1-yl)methylbutan-2-ol,
 1-(4-chlorophenoxy)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,
 antifungal activity 4756.
 clinical microbiology, media (culture), instant potatoes 811.
 composts, antagonists, Rhizoctonia solani, damping-off suppression, Raphanus sativus 290.
 conidia, preparation, use, scanning electron microscopy 2532.
 conidia, sporangiospores, separation techniques, solutions, dextrans, polyethylene glycol, two-phase systems 8489.
 contact lenses contamination, disinfectants solutions 5871.
 contamination, cacao beans, ionizing radiation antifungal activity 4568.
 contamination, contact lenses, eye, man 1527.
 contamination, polyvinyl chloride, films, biodegradation 1039.
 contamination, propionic acid, preservatives, pelleting effects on, feeds, corn 7884.
 contamination, raw materials use production contamination 8342.
 conservation, organic matter, wastes, biomass, methodology, books 6793.
 corn dust association 1904.
 corrosion, pipes, air conditioning 4677.
 crop residues, Hordeum vulgare, Medicago sativa, smoke, antifungal activity 8319.
 dairy starters, cheese 6985.
 damping-off, survival, seeds dispersal, Platypodium elegans 1240.
 decomposition, Pinus leaves, saprophagy, food preferences, Pocillo scaber 2912.
 degradation, role oxygen free radicals, photochemistry, models 3663.
 detritus lignocelluloses biodegradation, salt marshes sediments 6171.
 dextranase, hydrolysis, polysaccharides, Streptococcus 8679.
 dextranase, isolation, characterization 5138.
 3,4-dichloroaniline biodegradation 6947.
 2,4-dioxohexahydro-1,3,5-triazine inhibition 3970.
 disease control, captan, benomyl, seed treatments, Zea mays 2093.
 disease control, soil amendment, sewage sludge composts, crops 5488.
 disease resistance, plant breeding, Glycine max 5473.
 disease resistance plant breeding, Sorghum 8897.
 ecosystem analysis, soil moisture, seasonal variations, vertical distribution, tundra 2129.
 effects on ameba population dynamics, humus enrichment 4629.
 endogenous species, Acacia rust, Hawaii 7236.
 enzymes, pulp mills, lignin hydrolysis, paper, starch hydrolysis, paper mills 49.
 ergot alkaloids production, biotechnology, reviews 4379.
 ethanol production, biotechnology, books 4234.
 ethanol production, xylene fermentation 9344.
 extracellular lactase biosynthesis 8587.
 extracts, detection, pentoxifylline metabolites, thin-layer chromatography, high-performance liquid chromatography 8433.
 fermentation, aureofungin, hamycin, high-pressure liquid chromatography, isolation, antifungal activity 5800.
 fermentation, growth conditions 852.
 filamentous microorganisms, antibiotic sensitivity testing, agar dilution test 5763.
 filtrates effects on, Citrus limon pollen germination 2800.
 fruit rot, post-harvest decay 8876.
 fungicides, chemical control, growth, paints films 1290.
 p-D-galactosidase, immobilized enzymes, wastewater treatment, whey, dairy industry 5630.
 glucose oxidase, food industry 55.
 p-D-glucosidase, purification, activity, bioassays 5166.
 grain infection, Sorghum 7150.
 Gramineae root rot, biodegradation, filter paper 1001.
 growth, contamination, laits production, corks, wine 7798.
 haloperoxidase, substrate specificity, alkenes 5187.
 host-pathogen interactions, host plants, genetic analysis, host specificity 8767.
 hydrocarbons, aromatic compounds, biodegradation, reviews 8278.

Fungi, (continued)

hyphae length, measuring techniques 8985.
hyphae, wood, staining methodology 7631.
identification, wastewater treatment, peat filtration 7494.
immobilized enzymes systems corn syrup production 208.
incidence, *Lolium perenne* roots, nitrogen, phosphorus effects on 6340.
industrial effluents, lignin, pulp mills, waste water, coastal waters 1455.
infection, *Glycine* max, pathogenicity 240.
infection, Solanaceae, oxalic acid levels 6281.
infection, *Triticum aestivum* yield, fungicides disease control, USA, Idaho 7951.
inoculum, *Zea mays* seeds, climatic conditions 1992.
inoculation, *Diphysa robinoides* leaves, phytoalexins production 5519.
inoculum media (culture), plant diseases field trials 5400.
inoculum production, antagonism, *Heterobasidion annosum*, biological control, *Picea abies* 8181.
isolation, identification, methodology 3231.
isolation, media (culture), identification, methodology, reviews 5082.
isoxazolyl thiazolidin-4-ones, antifungal activity, characterization 6313.
leaf rust powdery mildew, effects on, yield, disease resistance, *Triticum aestivum* genotypes 8096.
leaves decomposition 5306.
levels, buildings biodegradation 2720.
lignin, biodegradation 4440.
lignin biodegradation 6152.
lignin biodegradation, reviews 7829.
lipids biosynthesis, fluorescence 1678.
media (culture) 7632.
metabolism, furan, tetrahydrofuran, reviews 7824.
metals bioaccumulation, wood biodegradation 1030.
2-methoxy-1,4-benzquinone biosynthesis, vanillic acid metabolism, laccase activity 8644.
microbial pollution, odor intensity, relationship pH, oxygen, reservoirs 3212.
microbiocidal activity, ozone, nosocomial environments 2411.
mold, growth, development, soil 401.
mycelia immobilization, utilization, reviews 8486.
mycelia, penetration, wheat, barley 1080.
mycelia, sampling, fermenters 9332.
mycotoxins, food contamination, books 3384.
nicotine biodegradation 1890.
nuclei, fluorescence staining 5936.
oil, association, railway tracks, stimulation, biodegradation, field trials 1305.
organic acids, salts, antimicrobial activity, silage 6489.
organic matter decomposition, tropical environment, rain forests 2911.
pathogens, antifungal activity, 2-methylquinolines 5740.
pathogens, antigens extracts, thimerosal, formaldehyde, disinfection, clinical microbiology 810.
pathogens, association, nuclear polyhedrosis virus propagation, biological control, *Lymantria dispar* 6907.
pathogens, biological control, observation methods, *Globodera rostochiensis* 5224.
pathogens, isolation, feeds, storage buildings 582.
pathogens, plant diseases, biological control, books 4231.
pathogens, *Rhizobium japonicum* growth, *Glycine* max, pesticides effects on 1212.
pathology, *Sesamum indicum*, seeds 8837.
PCB biodegradation, reviews 7827.
pergolide metabolism, biosynthesis, pergolide sulfoxide, pergolide sulfone 7117.
pharmaceuticals production, reviews 8651.
pharmaceuticals sterilization 9144.
phenols, derivatives, physicochemical derivatives, antimicrobial activity 1353.
phosphate solubilization, soil 2138.
phytoflora, *Glycine* max, *Azotobacter chroococcum*, secretions, effects on 7252.
phytoalexins, role plant diseases 6222.
plant diseases, Coniferales, effects on growth, USSR 5603.
plant diseases, control, reviews 2843.
plant diseases, epidemiology, diagnosis, pathology 1101.
plant diseases, *Fragaria*, books 1687.
plant diseases, prophylaxis, disease control, fungicides foliar applications, *Glycine* max, USA, Georgia 8118.
plant diseases, *Solanum tuberosum*, books 3380.
plant diseases, *Vicia faba*, books 4236.
plant diseases, yield reduction, mechanisms, mathematical models 237.
plants roots pathogens, interaction, ectomycorrhizas, reviews 393.
polysaccharides, biosynthesis, industrial applications, reviews 8620.
polysaccharides, books 3383.
polysaccharides structures, reviews 2632.
population levels, relationship chitinase, assays, soil 2937.
post-harvest decay, disease control, dichloronitroline, *p*-phenylphenol, apples 8052.
post-harvest decay, fungal flora interaction, competition, factors affecting 8050.
post-harvest decay, grapes, effects on wine, fermentation 6939.
post-harvest decay, papaya, disease control, hot water 5469.
preservation methodology, culture collections 2526.
proteolytic enzymes, tanning, leather 48.
proteolytic enzymes, use dairy products, dairy industry 199.
protoplast fusion, reviews 6801.
protoplasts, lysis centrifugation system, clinical trials 4159.
recovery, use, antimicrobial agents removal equipment, man 3228.
+ *Rhizobium japonicum* mixed culture effects on, *Glycine* max nodulation, nitrogen fixation 2172.
rhizosphere microorganisms, phyllosphere microorganisms, *Adiantum capillus-veneris*, *Cotterach officinarum*, *Asplenium filare*, *Cheilanthes catanensis* 8961.
role, mineralization, lignin, *Spartina alterniflora*, *Juncus roemerianus*, Pinus eliottii, marine environment 1026.
rumen microorganisms, plants cell walls digestion, reviews 3669.
rust, host range, India 2036.
samples freezing, scanning electron microscopy 8487.
sanitizers, antimicrobial agents, dentures 2420.
saprophytes, antagonism, *Rhizobium* growth, *in vitro* 7248.
saprophytes, roots colonization, soil amendment, species composition, soil disturbance, mines 8230.
screening, exo-1,4- α -D-glucosidase production 8544.
screening, fermentation, chickens feces 3586.
sediments analysis, cooling towers 561.
single-cell protein production, use, rapeseed oil, palm oil 872.

Fungi, (continued)

sodium levels 5341.
soil microorganisms, methoxychlor effects on 9024.
soil microorganisms, permethrin derivatives toxicity 2174.
soil microorganisms, phosphamidon effects on 6388.
soil-borne diseases, interaction, endomycorrhizas, reviews 392.
solid wastes, disease transmission, *Rodentia*, *Diptera*, public health 2361.
species composition, *Notofagus dombeyi* forests, Argentina 3906.
species composition, orchards, *Citrus* 3830.
spilage, com, preservation, ammonia+propionic acid 7025.
spore germination, carbendazim, treatment, effects on, *Saccharum officinale* 8127.
spores, antimicrobial activity, alkylthiomethyl-isocholinolium chloride 9135.
spores, thermal injury, preservatives effects on, germination, growth 1072.
sputum clinical isolates, time effects on culture 807.
tannic acid biodegradation 3675.
T-2 toxin, electrophoretic mobility 5376.
T-2 toxin, HT-2 toxin, liquid chromatography assays, *Triticum aestivum*, *Secale cereale* 3739.
triacylglycerol lipase, proteinase, stimulation, ripening, cheese flavor, cheese 7860.
use antibiotic sensitivity testing, growth, synthetic media 9155.
utilization, starch, *Metroxylon sagu* 8686.
vesicular-arbuscular mycorrhizas, inoculation, *Eleusine coracana*, greenhouses screening 2145.
vesicular-arbuscular mycorrhizas, *Meloidogyne incognita*, mixed infection, phosphorus interaction, *Lycopersicon esculentum* 371.
vomiting, feeds contamination, pregnancy, pigs, effects on fetuses 2746.
white rot, biodegradation, *Triticum aestivum* lignocelluloses 6943.
white rot, detritus effects on pathogenesis, *Cynodon dactylon*, *Eremochloa ophiuroides*, *Poa pratensis*, *Stenotaphrum secundatum* 8785.
white rot, wood, manganese bioaccumulation 7240.
wood, preservatives, diffusion, toxicity 1251.
xylose utilization 3594.
yeasts, production, ethane, ethylene, acetylene 8265.
yellows, disease resistance, plant breeding, *Pennisetum clandestinum* 294.

Fungal diseases,
antibacterial activity, *Rhizobium* 1324.
antifungal activity, *Alternaria dauci* persistent infection, *Daucus carota* seeds 1226.
antifungal activity, antibacterial activity, *Verticillium albo-atrum*, *Rhizobium melioli* 8922.
antifungal activity, methodology 1343.
antifungal activity, sensitivity, isolates variability, *Rhizoctonia solani* 8117.
applications, disease control, *Lolium perenne*, seeds yields 8108.
aquatic environment, antifungal activity screening 2893.
chemical control, fungi, growth, paints films 1290.
disease control, *Allium cepa*, bulb rot, *Botrytis alli* 326.
disease control, *Alternaria macrospora* infection, *Gossypium barbadense*, yield association 321.
disease control, *Alternaria tenuis albinis*, *Citrus* seedlings 1219.
disease control, *Ascochyta blight*, *Cicer arietinum* 3683.
disease control, *Botrytis cinerea*, shoot blight, *Pistacia vera* 2896.
disease control, coffee berry disease, *Coffea arabica*, *Colletotrichum coffeanum* 5517.
disease control, *Festuca arundinacea*, blight, *Rhizoctonia* 8172.
disease control, foliar applications, *Phytophthora infestans*, late blight, *Solanum tuberosum* 8915.
disease control, fungi infection, *Triticum aestivum*, yield, USA, Idaho 7951.
disease control, *Fusarium culmorum*, susceptibility, *Gramineae* 2895.
disease control, *Humulus lupulus* downy mildew, reviews 1170.
disease control, *Malus*, powdery mildew, *Podosphaera leucotricha* 5516.
disease control, *Monographella albescens*, scald, *Oryza sativa* 2087.
disease control, *Mycoasphaeria fijensis*, plant diseases, *Musa sapientum*, *Musa paradisica* 8914.
disease control, *Phaseolus vulgaris* rot 1210.
disease control, *Phytophthora cactorum* fruit rot, *Botrytis cinerea* grey mold, *Fragaria chilensis* 7214.
disease control, *Phytophthora infestans*, late blight, *Solanum tuberosum* 1214.
disease control, plant diseases 1215.
disease control, plant diseases 1221.
disease control, post-harvest decay, oranges, stem rot, green mold 5470.
disease control, *Prunus*, new records 339.
disease control, tomatoes, post-harvest decay, *Geotrichum* 1168.
disease control *Vigna unguiculata* damping-off, herbicides soil applications effects on 2090.
effects on, *Rhizobium melioli* growth, *Verticillium wilt*, *Medicago sativa* 1211.
effects on spores survival, pathogens, *Beauveria bassiana*, *Leptinotarsa decemlineata* 2647.
effects on survival, Coniferales seedlings, mycorrhizas, cold storage 5581.
efficacy, phytopathogenic fungi incidence, *Phaseolus vulgaris* 2086.
field trials, effects on, yield, *Triticum*, *Hordeum vulgare* 327.
foliar applications, effects on *Eserohium rostratum* leafspot, *Chrysoidocarpus lutescens* 3910.
foliar applications, prophylaxis, disease control, plant diseases, *Glycine* max, USA, Georgia 8118.
fumigation, use, soil sterilization, disease control, powdery mildew, Turkey 337.
+ insecticides, seed treatments, chemical control, *Hordeum*, *Rhopalosiphum maidis* 6317.
Macrophomina phaseolina plant diseases, effects on pathogenicity 7211.
pesticide residues, masts, fermentation, protection, *Botrytis cinerea* 3601.
phytopathogenic fungi resistance, disease control, plant diseases, mathematical models 439.
powdery mildew disease control, effects on soil microorganisms, plants 2078.
prophylaxis, wood, biodegradation, *Coniophora puteana*, *Aspergillus tamarii* 1252.
Rhizoctonia sensitivity 8106.
role, *Colletotrichum gloeosporioides* polygalacturonase inhibition 1224.
Saccharomycetes cerevisiae biodegradation, association, fermentation 990.
seed treatments, effects on, black point, *Alternaria alternata*, *Triticum* 8930.
seed treatments, effects on nodulation, *Trigonotis* fixation, inoculation, *Bradyrhizobium japonicum*, *Glycine* max 8998.
seed treatments, *Festuca arundinacea*, *Acremonium coenophialium* infection, disease control 1227.
seed treatments, *Glycine* max, *Arachis hypogaea* 1229.
seed treatments, prophylaxis, *Marssonina brunnea* infection, *Populus deltoides* 2112.

- Fungicides, (continued)**
seed treatments, seed-borne diseases, *Shorea robusta* 8178.
seed-borne fungi, seed-borne diseases, *Pinus wallichiana* 8177.
soil amendment, disease control, *Solanum tuberosum*, plant diseases, *Globodera rostochiensis*, *Verticillium dahliae* 8121.
toxicity, *Saccharomyces cerevisiae*, nontarget organisms, wine fermentation 2082.
Trichoderma viride, silver-leaf disease, integrated control, *Trichoderma viride*+fungicides, pruning wounds, *Chondrostereum purpureum* 5588.
+*Trichoderma viride*, use, disease control, *Pythium ultimum* damping-off, *Fusarium* wilt, *f.sp.spis*.
use, treatment, *Epiloch typhina* infection, *Festuca arundinacea* 8119.
- Fungistasis,**
disease control, soil-borne diseases, soil amendment, *Fusarium oxysporum f.sp.vasinfertum*, *Fusarium oxysporum f.sp.lycopersici* 8104.
induction, biological control, soil-borne diseases, phytopathogenic fungi, reviews 331.
soil, bacteria, inhibition spore germination, conidia, *Bipolaris victorae* 8966.
soil, disease control, phytopathogenic fungi, soil-borne diseases 332.
soil, phytopathogenic fungi, soil-borne diseases 328.
soil properties, phytopathogenic fungi, soil-borne diseases, reviews 329.
- Fungistats,**
disinfection 1342.
- Fungus gardens,**
antifungal activity, caryophyllene epoxide, plant extracts, *Hymenaea courbaril* 2221.
- Furan,**
metabolism, reviews 7824.
- Furazolidone,**
mutation, *Vibrio cholerae*, streptomycin resistance induction 3993.
- Furmecycloz,**
+*Trichoderma viride*, integrated control, silver-leaf disease, *Prunus domestica* 5588.
- Furunculosis,**
Aeromonas salmonicida, survival, rivers fresh water, role disease transmission, *Salmonidae* 4937.
- Furic acid,**
Fusarium, biosynthesis, role, plant diseases, reviews 7100.
- Fusarin C,**
Fusarium moniliforme, structure 5256.
- Fusarium,**
allopathy, *Asparagus officinalis* 3831.
antifungal activity, sesquiterpenes 8317.
biodegradation, pharmaceuticals, reviews 6956.
biological control, insects, reviews 6926.
biomass, measuring techniques, glucosamines levels 6791.
blight, *Poa pratensis*, association, *Leptosphaeria korrae*, *Phialophora graminicola* 5418.
canker, *Rubus*, USA, Ohio 8846.
cellulolytic enzymes activity 6871.
cellulolytic enzymes production, optimization 1811.
corn rot, *Gladiolus*, disease resistance 2063.
crater disease, *Triticum aestivum*, soil fumigation+solar radiation effects on 8120.
4-deoxynivalenol, food contamination, effects on body weight, food conversion, *Salmo gairdneri* 219.
detection, oxidase extracellular enzymes 1799.
dry rot, *Solanum tuberosum*, growth conditions 2030.
ear rot, *Zea mays*, mycotoxins detection 7083.
ethanol, production, fermentation, cellulose, reviews 6107.
infection, *Medicago sativa*, epidemiology, British Isles 1971.
infection, *Triticum aestivum*, yield 7948.
interaction, *ectomycorrhizas*, reviews 393.
interspecific relationships, insects, host range, biological control, reviews 5215.
isolation, *Citrus sinensis*, *Citrus jambhiri*, roots necrosis, association, blight 11336.
laccase, aromatic compounds oxidation 5977.
media (culture), detection, zearalenone, zearalenol, T-2 toxin, deoxynivalenol, methodology 3748.
microwave radiation soil effects on 3361.
mycotoxicosis, food poisoning, domestic animals, reviews 7017.
mycotoxins, biosynthesis, reviews 7105.
mycotoxins, biosynthesis, role, plant diseases, reviews 7100.
mycotoxins, contamination, food, reviews 7102.
mycotoxins, detection, cereals, use, gas chromatography 7077.
mycotoxins, detection, physicochemical properties, reviews 7104.
mycotoxins, feeding regimes, turkeys, females, reproduction 3720.
mycotoxins, food contamination, man, books 6798.
Phaseolus vulgaris root rot, effects on N-(phosphonomethyl)glycine activity 7943.
plant diseases, chlamydospores, role, survival, pathogenesis, reviews 7189.
plant diseases, mycotoxins, biodegradation, biomass, production, biological control, reviews, books 7649.
plant diseases, *Solanum tuberosum*, effects on yield 7173.
plant diseases, *Solanum tuberosum*, incidence, Finland 7171.
plants, growth regulators production 3444.
pod rot, *Arachis hypogaea*, calcium levels effects on pathogenesis 1121.
rhizoplane microorganisms, Egypt, seasonal variations 6335.
root rot, disease control, soil amendment, sawdust, oil cake, *Triticum aestivum* 8088.
root rot, disease resistance, plant breeding, selection, *Trifolium pratense* 6292.
root rot, soils (sandy), *Zea mays* 1998.
scab, Gramineae, pathology, zearalenone production, animals ingestion, toxicity, reviews 7056.
soil isolation, media (selective) 797.
soil microorganisms, grasslands 3950.
spores, thermal injury, preservatives effects on, germination, growth 1072.
survival, soil microorganisms, role, forest floor 5539.
thiophanate-methyl drug tolerance, identification methodology 7213.
toxins, detection, grain, Egypt 7069.
vomitoxin, structure 1930.
vomitoxins, contamination, chickens liver, lipids levels 2748.
wilt, 4-Medicago infection, disease resistance, plant breeding, *Lycopersicon esculentum* 2864.
wilt, *Solanum khasianum* 1161.
zearalenone, incident, wheat, barley, rye, corn 1079.
- Fusarium acuminatum,**
T-2 toxin, biosynthesis, sorbic acid, stimulation 2761.
- Fusarium avenaceum,**
citrinin like compounds 5373.
damping-off, *Trifolium subterraneum*, disease control, soil pasteurization 6301.
filtrates, effects on *Heterodera daveri* penetration, *Trifolium subterraneum* roots 5524.
Heterodera daveri interaction, plant diseases, *Trifolium subterraneum* 5411.
wilt, disease resistance, *Solanum tuberosum* 1146.
- Fusarium bicolor,**
stalk rot, pathology, *Sorghum bicolor* 7966.
- Fusarium culmorum,**
fluoride solubilization, use decontamination, soil pollution 7258.
Gramineae susceptibility, disease control, fungicides 2895.
infection, *Lolium perenne*, disease control, use, calcium peroxide, comparison, carbendazim, drazoxolon 1203.
root rot disease resistance, inheritance, *Triticum* 2885.
zearalenone, incident, wheat, barley, rye, corn 1079.
- Fusarium equiseti,**
mancozeb+curzate antifungal activity 2085.
mycotoxins identification, straw, *Oryza sativa* 7093.
- Fusarium flocciferum,**
phenols biodegradation, industrial effluents isolates 8685.
- Fusarium fusarioides,**
leafspot, *Punica granatum*, new records 2004.
- Fusarium graminearum,**
galactose oxidase characterization 5982.
galactose oxidase kinetics 927.
galactose oxidase kinetics, ions effects on 922.
liquid culture, production, vomitoxin 2755.
nivalenol, vomitoxin, levels, food contamination, flour, *Hordeum vulgare* 2737.
stalk rot, overwintering, crop residues, USA, Minnesota, *Zea mays* 7967.
- Fusarium larvarum,**
biological control, insects, reviews 6926.
- Fusarium lateritium,**
biological control, insects, reviews 6926.
conidia, antagonism, biological control, *Eutypa amerieae* wound infection, orchards, *Prunus americana* 6307.
- Fusarium lini,**
cellulase purification methodology 3451.
exo-cellulohydrolase, purification, characterization 102.
- Fusarium lycopersicum,**
lipids production, when, nutrient sources 7788.
- Fusarium merisporides,**
fluoride solubilization, use decontamination, soil pollution 7258.
- Fusarium molinera,**
infection, *Zea mays* seeds, climatic conditions 1992.
- Fusarium moniliforme,**
antagonism, *Rhizobium* growth, in vitro 7248.
colonization, *Zea mays*, irrigation effects on seed-borne diseases 7947.
disinfectants antifungal activity, solutions, contact lenses 5870.
fusarin C structure 5256.
gibberellin acid biosynthesis, when fermentation, mathematical models 5970.
infection, *Zea mays*, endosperm, mutants, effects on, seedlings 3804.
mutagens production 122.
seeds infection, disease resistance, plant breeding, *Zea mays* 8074.
var.subglutinans, infection, *Plantago lanceolata*, spatial distribution, relationship, incidence 7192.
- Fusarium moniliforme var subglutinans,**
infection, *Ananas comosus*, factors affecting pathogenesis 8834.
pitch canker, *Arthrobacter*, biological control, *Pinus* 2918.
pitch canker, *Pinus virginiana*, disease resistance 5599.
- Fusarium nivale,**
growth, lastanox T20 effects on 8259.
- Fusarium oxysporum,**
blight, weeds, disease reservoirs, Glycine max 8770.
damping-off, *Pinus banksiana*, *Picea mariana*, soil amendment, organic matter, effects on 1239.
ethanol production, xylose fermentation 9344.
fermentation, carbon sources 1860.
Heterodera daveri interaction, plant diseases, *Trifolium subterraneum* 5411.
mixed infection, sunn hemp mosaic virus, pathogenesis, *Vigna unguiculata* seedlings, nutrition effects on 6234.
mixed infection, sunn hemp mosaic virus, pathogenesis, *Vigna unguiculata* plant diseases, scanning electron microscopy 6236.
pathogens reduction, digestion (anaerobic), agricultural wastes 8390.
pathogens, *Rhizobium japonicum* growth, Glycine max, pesticides effects on 1212.
rRNA 18S, rRNA 25S levels, threo-1-phenyl-2-nitro-1,3-diacetoxy-propane effects on 8921.
root rot, benomyl, PCNB, *Ficus benjamina* 8916.
root rot, biological control, *Laccaria laccata*, *ectomycorrhizas*, aromatic compounds, *Pseudotsuga menziesii* 5562.
soil microorganisms, role, cellulose mineralization 4631.
tin, antifungal activity 1341.
wilt, biological control, suppression, *Pseudomonas putida*, survival, soil moisture, *Linum usitatissimum* 2897.
wilt, disease resistance, plant breeding, cultivars, *Citrus latans* 8905.
- Fusarium oxysporum f.sp.apli,**
yellow, disease resistance, inheritance, *Apium graveolens* 8066.
yellows, non-pathogenic strains, biological control, *Apium graveolens* 6306.
- Fusarium oxysporum f.sp.ciceri,**
saprophy, plant debris colonization, temperature effects on, soil 5618.
- Fusarium oxysporum f.sp.eteleidis,**
wilt, disease resistance, gene regulation, *Cicor arietinum* 3867.
wilt, disease resistance inheritance, *Cicor arietinum* 296.
- Fusarium oxysporum f.sp.cubense,**
pathogenicity, plants, methodology 3768.
- Fusarium oxysporum f.sp.cucumerinum,**
chlamydospores, spore germination, bacteria, fluorescence, cytolysis, effects on 8227.
- Fusarium oxysporum f.sp.eteleidis,**
wilt, disease resistance, plant breeding, *Elaeis guineensis* 2871.
- Fusarium oxysporum f.sp.lini,**
in situ, soil, microscopy, fluorescence 1267.
single-cell protein, production amino acid composition, food industry, industrial wastes 1729.

- Fusarium oxysporum f.sp. lycopersici**,
antifungal activity, chromium(III), chromium(VI) 8316.
antifungal activity,
4,4'-biphenylenedihydrazone-3-(3-methyl)-2-pyrazolin-4,5-diones 8300.
disease control, soil-borne diseases, soil amendment, fungistasis 8104.
mixed infection, + *Meloidogyne incognita*, pathogenesis, *Lycopersicon esculentum* 8831.
wilt, *Lycopersicon esculentum*, factors affecting 5455.
- Fusarium oxysporum f.sp. medicaginis**,
toxins, disease resistance, polyploidy, cell lines regeneration, *Medicago sativa* 5494.
- Fusarium oxysporum f.sp. melonis**,
infection, *Cucumis melo* germplasm, disease resistance 313.
- Fusarium oxysporum f.sp. nicotianae**,
damping-off, disease resistance, Philippines, *Nicotiana tabacum* 7179.
- Fusarium oxysporum f.sp. niveum**,
infestation, soil, nonhost crops growth association, effects on levels 3826.
wilt, disease resistance, agricultural practices, *Citrus latifolius* 2848.
- Fusarium oxysporum f.sp. phaseoli**,
+ sunn hemp mosaic virus mixed infection, effects on growth *Vigna unguiculata* 5407.
- Fusarium oxysporum f.sp. psii**,
incidence, *Pisum sativum* wilt 241.
wilt, *Pisum* varieties, field trials 1979.
- Fusarium oxysporum f.sp. tracheiphilum**,
+ sunn hemp mosaic virus mixed infection, effects on *Vigna unguiculata* growth 5407.
- Fusarium oxysporum f.sp. tulipae**,
bulb rot, disease resistance breeding, *Tulipa* 299.
- Fusarium oxysporum f.sp. vasinfectum**,
disease control, soil-borne diseases, soil amendment, fungistasis 8104.
isolation, *Gossypium hirsutum*, race, geographical distribution, USA 1153.
Ocimum basilicum essential oils antifungal activity, in vitro 9105.
plant diseases, herbicides effects on, *Gossypium hirsutum* 7963.
wilt, disease resistance, terpenoids, roots exudates, *Gossypium hirsutum* 8883.
wilt, interspecific relationships, *Meloidogyne incognita*, soil nutrients uptake, *Gossypium barbadense* 283.
- Fusarium roseum**,
charcoal rot, *Helianthus annuus*, etiology 4551.
damping-off, *Medicago sativa* seedlings, greenhouses, USA, California 1115.
diacetoxyscirpenol, feeds contamination, feeding behavior, chickens 7898.
dry rot, disease resistance, tubers, *Solanum tuberosum* 8826.
growth, mycotoxins biosynthesis, silage fermentation, *Lolium perenne* 5369.
pathogenesis, *Triticum aestivum* seedlings leaves, pathogenicity 7151.
pathogenicity, *Solanum tuberosum*, disease resistance, lignin deposition 7206.
synergism, *Erwinia carotovora* subsp. *atroseptica*, *Erwinia carotovora* subsp. *carotovora*, blackleg, *Solanum tuberosum* 7191.
virulence, *Trifolium pratense* 1116.
zearealenone biosynthesis, conversion, α -zearealenol, β -zearealenol 6100.
- Fusarium sambucinum**,
trichothecenes biosynthesis, potatoes 5372.
- Fusarium solani**,
antifungal activity, miconazole 4016.
biological control, Insecta, reviews 6926.
blight, relationship soil nutrients, *Citrus* 2093.
charcoal rot, *Helianthus annuus*, etiology 4551.
disinfectants antifungal activity, solutions, contact lenses 5870.
heavy metals toxicity, resistance, association, sodium thiosulfate, sodium tetrathionate 2201.
infection, *Dioscorea*, effects on diosgenin levels 7172.
infection, *Glycine* max, pathogenicity 240.
 β -ionone, derivatives, retinol, antifungal activity 6491.
toxins, *Allium cepa* root rot 2028.
triacylglycerol lipase production, carbon sources 1805.
wilt, disease resistance, *Solanum tuberosum* 1146.
- Fusarium solani f.sp. phaseoli**,
infection, *Phaseolus vulgaris*, soil moisture, roots density, effects on 3782.
kivione hydratase, purification, characterization 1749.
- Fusarium solani f.sp. psii**,
infection, esterase, depolymerization, suberin, tubers, *Solanum tuberosum* 8852.
root rot, *Pisum sativum*, disease control, use, *Trichoderma viride*+fungicides 338.
- Fusarium solani var. coeruleum**,
biosynthesis, vomitoxin, HT-2 toxin, acetyldeoxynivalenol 5372.
experimental infection, *Solanum tuberosum*, injection systems 4495.
- Fusarium sporotrichiella**,
trichothecenes chemical composition 1076.
- Fusarium sporotrichoides**,
T-2 toxin, detection, *Zea mays*, enzyme-linked immunosorbent assay 5365.
experimental infection, *Solanum tuberosum*, injection systems 4495.
wilt, disease resistance, *Solanum tuberosum* 1146.
- Fusarium tabacinum**,
plant diseases, pathogenicity, host range, Australia 7126.
- Fusarium tricinum**,
growth, mycotoxins biosynthesis, silage fermentation, *Lolium perenne* 5369.
isolation, *Festuca arundinacea*, T-2 toxin biosynthesis 7059.
- Fusarium udum**,
disease resistance plant breeding, *Cajanus cajan*, 8899.
- Fusicoccin**,
effects on sodium, potassium, transport, roots, *Beta vulgaris* 8741.
Fusicoccum, effects on protons pumps, membrane potential, roots, *Zea mays* 8739.
levels, *Fusicoccum amygdali* infection, seeds, *Zea mays* 8740.
pH, protoplasts, *Acer pseudoplatanus*, effects on 7110.
translocation, *Fusicoccum amygdali* infection, *Prunus amygdalus* 8809.
- Fusicoccum**,
fusicoccin effects on pH, protoplasts, *Acer pseudoplatanus* 7110.
fusicoccin, effects on protons pumps, membrane potential, roots, *Zea mays* 8739.
fusicoccin, effects on sodium, potassium, transport, roots, *Beta vulgaris* 8741.
- Fusicoccum amygdali**,
infection, fusicoccin levels, seeds, *Zea mays* 8740.
infection, fusicoccin translocation, *Prunus amygdalus* 8809.
- Fusidic acid**,
antibacterial activity, *Staphylococcus aureus* 7422.
biosynthesis, liposomes, morphogenesis, metabolism, *fusidum coccineum* 7469.
effects on *Bacillus subtilis*, sporulation, stringent response 2242.
- Fusidum coccineum**,
fusidic acid biosynthesis, liposomes, morphogenesis, metabolism 7469.
- Fusiform rust**,
Cronartium quercum, pathogenesis, *Pinus elliotii* 4615.
Cronartium quercum f.sp. *fusiforme*, disease resistance, necrosis ultrastructure, embryos, *Pinus taeda* 362.
Cronartium quercum f.sp. *fusiforme*, disease resistance, seedlings, *Pinus elliotii* 2921.
Cronartium quercum f.sp. *fusiforme*, disease resistance, density effects on, *Pinus elliotii* 8187.
Cronartium quercum f.sp. *fusiforme* inoculum, phenology, *Pinus elliotii* var. *elliottii* 3921.
Cronartium quercum f.sp. *fusiforme*, stems lesions, *Pinus elliotii* var. *elliottii* seedlings 7234.
Pinus taeda, *Pinus elliotii* var. *elliottii*, pathology location, relationship, yield 8943.
- Fusobacterium**,
identification, biochemical characteristics 2505.
- Gadus morhua**,
spoilage, hydrogen sulfide, bacteria 3689.
- Gaeumannomyces graminis**,
incidence, Gramineae roots 2766.
induction disease resistance, take-all, *Triticum aestivum* 2849.
take-all, manganese deficiency effects on disease resistance, *Triticum aestivum* 8099.
take-all, *Triticum aestivum*, ameba population dynamics, suppression 1173.
- Gaeumannomyces graminis var. graminis**,
biological control, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 5512.
- Gaeumannomyces graminis var. tritici**,
growth inhibitors production 8374.
growth, water potential, soil temperature effects on, soil 8966.
media (selective) 4218.
pathogenicity, plant diseases, factor affecting continuous culture 1091.
root rot, *Triticum aestivum*, pathogenesis 3809.
soil, growth, take-all epidemiology, *Triticum aestivum* 7145.
survival, soil 6351.
take-all, biological control, seed treatments, *Pseudomonas fluorescens*, *Triticum aestivum* 336.
take-all, *Hordeum vulgare*, senescence effects on 7954.
take-all, tillage, association, pathology, *Triticum aestivum* 7977.
take-all, *Triticum aestivum* 7953.
take-all, *Triticum aestivum*, biological control, *Gaeumannomyces graminis* var. *graminis*+*Phialophora* 5512.
take-all, *Triticum aestivum*, virulence 1126.
- Galactose**,
Agrobacterium tumefaciens, polysaccharides biosynthesis, role lipids 6886.
Fusarium oxysporum fermentation 1860.
utilization, *Streptococcus thermophilus* selection, lactose limitation continuous culture 6191.
- Galactose oxidase**,
characterization, *Fusarium graminearum* 5982.
kinetics, *Fusarium graminearum* 927.
kinetics, *Fusarium graminearum*, ions effects on 922.
- Galactose-binding protein**,
ligands binding, *Escherichia coli* 1726.
- α -D-Galactosidase**,
nodules, *Glycine* max, symbiosis, *Bradyrhizobium japonicum* 6363.
purification, characterization, *Aspergillus tamarii* 5364.
purification, characterization, *Pycnoporus cinnabarinus* 7694.
purification, molecular weight, characterization, *Aspergillus tamarii* 5988.
- β -D-Galactosidase**,
activity, assays, dairy industry, *Saccharomyces lactis*, *Kluyveromyces fragilis* 5172.
activity, glucose effects on, *Vibrio cholerae* 8609.
activity, measuring techniques 4350.
Aspergillus niger, lactose hydrolysis, use, bioreactors 4314.
association, inulinase, production, batch culture, continuous culture, *Kluyveromyces fragilis* 7745.
biosynthesis, biomass concentration effects on, *Escherichia coli* 6028.
biosynthesis, *Escherichia coli* 3504.
Escherichia coli, immobilized enzymes, lactose hydrolysis, milk 8542.
immobilization, use textiles, hydrophobicity 5142.
immobilized enzymes, *Aspergillus niger* 69.
immobilized enzymes, *Aspergillus niger*, fluidized beds 82.
immobilized enzymes, *Aspergillus niger*, membranes, bioreactors 83.
immobilized enzymes, *Aspergillus oryzae*, lactose hydrolysis, skim milk, whey 206.
immobilized enzymes, stability, kinetics, *Aspergillus oryzae* 80.
immobilized enzymes, use cellulose beads, *Escherichia coli* 72.
immobilized enzymes, wastewater treatment, whey, dairy industry 5830.
physicochemical properties, lactose hydrolysis, *Candida pseudotropicalis* 2577.
production, continuous culture, *Trichoderma reesei* 8541.
production, genes cloning, *Streptomyces* 4039.
purification, characterization, *Bifidobacterium bifidum* subsp. *pennsylvanicum* 3515.
purification, characterization, *Lactobacillus helveticus* 6848.
purification, characterization, *Penicillium multicolor* 2616.
- Galleria mellonella**,
biological control, γ -endotoxin, *Bacillus thuringiensis* var. *kurstaki* 7786.
biological control, *Beauveria bassiana*, conidia subculture effects on pathogenicity 2656.
- Gaïlic acid**,
production, *Klebsiella pneumoniae*, *Corynebacterium*, biodegradation, tannins, *Caesalpinia spinosa* 5106.
- Galls**,
Phytophthora macrospora, leaves, biological control, *Torilis japonica* 8029.
- Ganglioside GM1**,
+enzyme-linked immunosorbent assay, detection, *Escherichia coli* enterotoxins 1960.
- Gangrene**,
Fusarium, effects on yield, *Solanum tuberosum* 7173.
- Ganoderma applanatum**,
 β -D-glucans biosynthesis, antitumor activity 2637.
- Ganoderma lucidum**,
infection, *Areca catechu* roots, detection methodology, fluorescent antibody test

Genes, (continued)

Bremia lactucae, virulence, sexual reproduction, recombination, host-pathogen interactions, disease resistance genes, *Lactuca sativa* 2840.
 cellulase, *Cellulomonas fimi*, transformation, gene expression, host systems, *Escherichia coli* 6018.
 cellulase, exo-cellulohydrolase, introns excision, methodology, clones, *Trichoderma reesei* 8568.
 cloning, β -D-galactosidase production, *Streptomyces* 4039.
 cloning, antigens, vaccines production, *rotavirus* 8643.
 cloning, exo-1,4- α -D-glucosidase, *Aspergillus awamori*, cellulase, *Trichoderma reesei* 3498.
 cloning vectors, antibiotics production, *Streptomyces* 4845.
 cytochrome c CYP1 gene, cloning, yeasts 819.
 disease resistance, linkage analysis, *Lactuca sativa* 5474.
 disease resistance, plant breeding, *Phaseolus vulgaris*, halo blight, *Pseudomonas phaseolicola* 5481.
 disease resistance, *Pseudocercospora* herpotrichoides eye spot, *Aegilops ventricosa*, transfer, *Triticum aestivum* 8078.
 disease resistance, rust, *Puccinia hordei*, host-pathogen interactions, models, *Hordeum vulgare* 2860.
 disease resistance, speck, *Pseudomonas syringae* pv. tomato, inheritance, *Lycopersicon* 2828.
 enterotoxins, probes, *Escherichia coli* detection, water, DNA hybridization analysis 1087.
 α -D-glucosidase, gene expression, *Saccharomyces cerevisiae* 3442.
 hemagglutinins, influenza virus, vaccinia virus transfection, gene expression induction and response, hamsters, rabbits 4887.
 Hm gene, metribuzin, resistance, linkage, Rps1 gene, disease resistance, *Phytophthora megasperma* f. sp. glycinea, *Glycine* max 2064.
 hap gene, gene manipulation, hydrogenase kinetics, *Rhizobium* 9008.
 kanamycin resistance, hybridization analysis, transposon Tn5, gene expression, *Escherichia coli*, *Rhizobium meliloti* 442.
 lactase, cloning, role, *Streptococcus lactis*, fermentation, milk 2739.
 lactase lac gene, transformation, cloning vectors, *Streptococcus lactis* 6991.
 lactose metabolism, 6-phospho- β -D-galactosidase, transformation, plasmid pLZ64, *Lactobacillus casei* 5345.
 leghemoglobin, nodulin, genetic analysis, nodules, *Rhizobium*, nitrogen fixation, *Leguminosae* 2978.
 linkage analysis, penicillin biosynthesis, protoplast fusion, *Aspergillus nidulans*, *Aspergillus rugulosus* 4047.
 Lr 13 gene, *Triticum aestivum*, genetic control, disease resistance, leaf rust, *Puccinia recondita* f. sp. tritici 8069.
 Lys14 gene, *Saccharopine reductase* biosynthesis, *Saccharomyces cerevisiae* 7690.
 Lys9 gene, *Saccharopine reductase* biosynthesis, *Saccharomyces cerevisiae* 7690.
 lysine, acid, lactic acid, *Lactobacillus delbrueckii*, cloning, *Escherichia coli*, *Saccharomyces cerevisiae*, role, wine, fermentation 2681.
 nif gene, nod gene, linkage, gene transfer, nitrogen fixation, nodulation, fast-growing *Rhizobium*, reviews, *Leguminosae* 2966.
 nitrogen fixation, *Klebsiella pneumoniae*, gene expression, *Azotobacter vinelandii* 1280.
 nod gene, Tn plasmid vectors, *Rhizobium meliloti*, gene expression, nodules formation, *Agrobacterium tumefaciens*, *Escherichia coli* 6366.
 nucleotide sequence, toxins, amino acid sequence, *Corynebacterium diphtheriae* 7119.
 ompA gene outer membrane proteins detection, *Enterobacteriaceae*, hybridization analysis 1611.
 oncogenes, v-mos gene proteins, immunoglobulin G antisera, inhibition transformation, vaccines models, *Moloney sarcoma virus* 6648.
 pathogenicity, Erysiphe graminis, powdery mildew, host-pathogen interactions, disease resistance genes, *Hordeum vulgare* 2861.
 probes, *Campylobacter Vibrio cholerae* like toxins, *Escherichia coli* enterotoxins 6593.
 Rcs gene, *Glycine* max disease resistance, *Corscopora soja* leafspot 1172.
 Rpm gene, disease resistance, *Glycine* max, downy mildew, *Peronospora manshurica* races virulence 1202.
 Rps1 gene, *Phytophthora megasperma* f. sp. glycinea, linkage, metribuzin resistance, Hm gene, *Glycine* max 2064.
 segregation, disease resistance, plant diseases 4579.
 soybean mosaic virus disease resistance, inheritance, *Glycine* max 2853.
Streptococcus sanguis, lactose metabolism, antibiotic resistance, DNA, plasmids, *Streptococcus lactis* 6990.
 streptomycin resistance, hybridization analysis, transposon Tn5, gene expression, *Escherichia coli*, *Rhizobium meliloti* 442.
 susceptibility, *Helminthosporium maydis* phytotoxins, roots bioassays, *Zea mays* 8754.
 toxins protection antigens, *Bacillus anthracis*, cloning 1083.
 toxins tox gene, nucleotide sequence use, amino acid sequence predictions, *Corynebacterium diphtheriae* 7912.
 tyrosyl-HRNA synthetase, site-directed mutagenesis, structure-activity relationships, tyrosyl-HRNA synthetase, X-ray crystallography, *Bacillus stearothermophilus* 8573.
Vibrio cholerae toxins, nucleotide sequence, deletion mutant analysis, vaccines development 2327.
 virulence, *Puccinia graminis* f. sp. tritici, association, stem rust, geographical distribution 7972.
 virulence, *Puccinia graminis* f. sp. tritici stem rust, *Triticum aestivum* 4239.
 xa-5 gene, *Oryza sativa*, blight disease resistance, *Xanthomonas campestris* oryzae 6298.
 xylA gene, *Escherichia coli* xylase isomerase gene expression, promoters, *Saccharomyces cerevisiae* 5157.
 xylase isomerase, xylulokinase, *Escherichia coli*, cloning, use, ethanol, fermentation 983.
 zym gene, inheritance, linkage analysis, zucchini yellow mosaic virus disease resistance, *Cucumis melo* 5478.

Genetic control,

Agropyron disease resistance, infection, barley yellow dwarf virus, wheat streak mosaic virus 8089.
 disease resistance, *Triticum aestivum*, powdery mildew 8101.
 drug resistance, bacteria, books, conferences 3389.
 interloper production, lac promoter, triplac promoter 3424.
 Lr 13 gene, disease resistance, leaf rust, *Puccinia recondita* f. sp. tritici, *Triticum aestivum* 8069.
 maize dwarf mosaic virus infection disease resistance, *Zea mays* 2838.
 plasmids, aromatic compounds biodegradation, reviews 8279.
 toxins precursors biosynthesis, *Bacillus thuringiensis* 4487.

Genetic drift,

Salmonella typhimurium strains, Ames test variability 5914.
Salmonella typhimurium strains, Ames test variability, analysis 5915.
Salmonella typhimurium strains, Ames test variability, statistical analysis 5916.

Genetic engineering,

aminoglycoside antibiotics production, actinomycetes 5759.
 antibiotics biosynthesis, microorganisms 5764.
 antigens genes, cloning, vaccines production, viruses 5807.
 antigens, hepatitis B virus, vaccines, characterization 6640.
 bacteria, fermentation, proteins, recovery, reviews 7812.
 bacteria, viruses vaccines production 4075.
 biotechnology, brewing, fermentation, conferences 3390.
 biotechnology, cell fusion, industries, books 3367.
 biotechnology, fermentation, conferences, books 4250.
 brewing, *Saccharomyces cerevisiae* 3628.
 dairy starters, lactic acid bacteria 3696.
 diagnosis, plant diseases, microorganisms, electrophoresis, monoclonal antibodies, methodology 7921.
 exotoxin A hybrids, biotechnology, *Pseudomonas aeruginosa* 7121.
 flocculation gene transfer, ethanol production, *Saccharomyces cerevisiae* 4406.
 gene transfer, fermentation, *Clostridium*, *Bacillus*, reviews 3593.
 hepatitis B virus vaccines 2319.
 live vaccines, herpes simplex virus 6622.
 methylotrophic bacteria 5205.
 microorganisms, association enzymes production 4137.
 microorganisms, biotechnology 5206.
 microorganisms, detoxification, chlorinated hydrocarbons 4089.
 microorganisms, detoxification, waste treatment, research programs 4088.
 microorganisms, fermentation, methodology, characterization, books, conferences 8500.
 microorganisms, fermentation strains improvements, reviews 6124.
 microorganisms, use, waste treatment 4126.
 microorganisms, release, marine environment, estuaries, role, biodegradation, chemical pollution 3681.
 microorganisms, use, chemical pollution biodegradation, ecological evaluation 3685.
 microorganisms, use, industrial wastes pollution control 4125.
 microorganisms, use, waste treatment 4126.
 microorganisms, use, waste treatment 4127.
 microorganisms, use, waste treatment, chemical pollution biodegradation, books, conferences 3392.
 mitochondria DNA isolation methodology, yeasts 5086.
 monensin biosynthesis, *Streptomyces cinnamonensis* 6565.
 microorganisms, use, waste treatment 4126.
 nitrogen-fixing bacteria, plant breeding, plants, books, conferences 4243.
 pharmaceuticals production, microorganisms 8652.
 plant breeding, disease resistance, plant diseases 1186.
 plasmids, pollutants biodegradation, reviews, bacteria 4435.
 production, insulin, interferon, gene transfer, bacteria 3524.
 proteins production optimization, *Escherichia coli*, *Bacillus subtilis*, yeasts 3423.
 proteins production optimization, isolation, purification, *Escherichia coli* 3425.
 recombinants, vaccines production, picornavirus 6635.
 recombinants, vaccines production, vaccinia virus 6638.
Saccharo yces, brewing, reviews 4407.
Saccharomyces cerevisiae, production, drugs, cloning vectors, methodology 7775.
Saccharomyces cerevisiae, *Zymomonas mobilis*, ethanol, production, fermentation reviews 6112.
 single-cell protein production, reviews, microorganisms 3419.
 soybean milk flavor compounds, nitrosoguanidine, mutagenesis, *Lactobacillus casei* subsp. alactosus 3701.
 the stability of enzymes, food industry, thermophilic microorganisms 3495.
 vaccines, conferences, reviews 6800.
 vaccines production, avian infectious bronchitis virus 6637.
 vaccines production, hepatitis B virus 6608.
 vaccines production, herpes simplex virus 6616.
 vaccines production, immunoprophylaxis, rotavirus 6595.
 vaccines production, influenza virus 6604.
 vaccines production, rabies virus glycoproteins, gene expression, *Escherichia coli* 6621.
 vaccines production, recombinants, poxvirus 6633.
 vaccinia virus, vaccines, methodology 8385.
 viruses, DNA, vaccines, reviews 8386.
 viruses vaccines 4073.

Genetic screening,

Puccinia coronata disease resistance, *Avena sativa* 5489.

Genital tract,

enzyme-linked immunosorbent assay, detection, *Neisseria gonorrhoeae*, methodology comparison, man 7607.
 medical instruments, Chlamydia trachomatis, *Neisseria gonorrhoeae*, medical instruments, lubricants effects on 697.

Genitourinary tract,

gonorrhea, diagnosis, enzyme immunoassay, *Neisseria gonorrhoeae* 2481.

Genitourinary tract infection,

gram-negative bacteria, antibacterial activity, chlorhexidine digluconate+EDTA+tris, man 8456.
 Streptococcus group B identification methodology, pregnancy, man 2451.

Genomes,

bluetongue virus, double stranded RNA, analysis methodology 4148.
 characterization, vaccines production, respiratory syncytial virus 6630.
 plants, structure-activity relationships, nitrogen fixation, nitrogen-fixing bacteria, plant viruses, host-pathogen interactions, books, conferences 3391.

Genotoxicity testing,

Escherichia coli 9306.

Genotype-environment interactions,

Hemileia vastatrix, leaf rust, disease resistance, plant breeding, *Coffea arabica*, *Coffea canephora* 2872.
 host-pathogen interactions, disease resistance, reviews, crops 2868.
 phytopathogenic fungi, host-pathogen interactions, disease resistance, plant breeding, crops 2865.

Gentamicin,

antibacterial activity, *Bacteroides fragilis*, *Bacteroides melaninogenicus* 4851.
 antibacterial activity, clinical isolates 7444.
 antibacterial activity, clinical isolates, *Staphylococcus* 4805.
 antibacterial activity, *Mycobacterium fortuitum*, *Mycobacterium chelonae* 4850.
 antibacterial activity, *Pseudomonas aeruginosa* 7377.

gentamicin, (continued)

antibacterial activity, *Streptococcus faecalis* endocarditis, animal models, \pm mezlocillin, \pm ampicillin 4838.
 antibacterial activity, urine, pH osmotic potential effects on, *Escherichia coli*, *Pseudomonas aeruginosa* 3108.
 antibiotic resistance, clinical isolates, *Escherichia coli* 4004.
 antibiotic resistance, Enterobacteriaceae, isolation, waste water, plasmids transmission 9076.
 antibiotic resistance, lipopolysaccharides structure, *Pseudomonas aeruginosa* 7350.
 antibiotic resistance, plasmids mediation, *Staphylococcus aureus* 7327.
 antibiotic resistance, plasmids, transposition, *Staphylococcus aureus* 9066.
 antibiotic resistance, R factors characterization, clinical isolates, *Staphylococcus aureus* 9178.
 antibiotic resistance, *Salmonella typhimurium*, cattle 3998.
 antibiotic sensitivity testing, antibiotic resistance resistance, *Staphylococcus aureus* 7424.
 antibiotic sensitivity testing, AutoMicrobic test, *Pseudomonas aeruginosa* 5778.
 antibiotic sensitivity testing, disc-diffusion test, *Pseudomonas aeruginosa*, statistical analysis 479.
 antibiotic sensitivity testing, *Escherichia coli* 7440.
 antibiotic sensitivity testing, gram-negative bacteria, isolation, heart surgery postoperative infection 3107.
 antibiotic sensitivity testing, *Proteus penneri* 9162.
 antibiotic sensitivity testing, *Pseudomonas aeruginosa* 3079.
 antibiotic sensitivity testing, quality control, mathematical models, *Staphylococcus aureus*, *Escherichia coli*, *Pseudomonas aeruginosa* 1400.
 antibiotic sensitivity testing, *Streptococcus faecalis* 4808.
 antibiotic synergism, aztreonam, antibacterial activity, gram-negative bacilli, *Staphylococcus aureus* 6504.
 antibiotic synergism, cefotaxime, *Staphylococcus* 1382.
 antibiotic synergism, penicillin, clindamycin, metronidazole, *Bacteroides melanogenicus*, *Bacteroides fragilis* 3118.
 antibiotic synergism, penicillin G, vancomycin, cefotaxime, bactericidal activity, *Streptococcus group G* 7423.
 antibiotic synergism, rifamycin, antibacterial activity, *Staphylococcus epidermidis* 6369.
 bactericidal activity, antibacterial activity, clinical isolates 6540.
 bactericidal activity, cephalosporins, enhancement, Enterobacteriaceae, clinical isolates 6513.
 bacteriostasis, synergism, antagonism, fatty acids, bone 4052.
 bioassays, methodology 8354.
 + carbacillin + rifampin, antibiotic synergism, *Pseudomonas maltophilia* 3091.
 + ceftizoxime, antibacterial activity, *Pseudomonas aeruginosa*, clinical isolates 6516.
 comparison, antibiotic K-4619, antibacterial activity 7479.
Escherichia coli resistant mutant, nitrofurantoin cross-resistance, genetic analysis 9065.
 + nafcillin, bactericidal activity, *Staphylococcus aureus*, serum assays, treatment, endocarditis, rabbits 478.
 serum levels, assays comparison, man 3106.
 uptake, antibiotic resistance, *Staphylococcus aureus* 9075.
Gentamicin sulfate,
 antibacterial activity, antibiotic sensitivity testing 4852.
Gerania lutea,
 fungal-vascular mycorrhizas symbiosis detection 2131.
Geographical distribution,
Bremia lactucae downy mildew, *Lactuca sativa*, virulence, Australia 3835.
 ecological distribution, Canada, Endogonaceae, *Glomus*, taxonomy 8166.
Fusarium oxysporum f.sp. *vasinfectum* races, *Gossypium hirsutum* isolation, USA 153.
Legionella pneumophila, seasonal variations, cooling towers, USA 4130.
 plant diseases, pathogens host range, Seychelles 5398.
Puccinia graminis races, isolation, *Avena sativa*, *Triticum aestivum*, USA, Mexico 1125.
 soil microorganisms, deserts, forests, USA, Arizona 7246.
Geyococcus,
 comets, suppression, damping-off, *Rhizoctonia solani*, *Raphanus sativus* 290.
Glechium,
 post-harvest decay, tomatoes, fungicides, disease control 1168.
 surfaces, interaction *Penicillium camemberti*, role aroma compounds, ripening, Camembert cheese 6186.
Gleichenia candidum,
 antifungal activity, sodium dodecylbenzene sulfonate 8054.
 bioreactors, cellulose hydrolysis, comparison 4441.
 cellulase, cellulose hydrolysis, bioreactors 4355.
 cellulase, cellulose hydrolysis, reactors 7736.
 cellulolytic enzymes production 6875.
 cellulose hydrolysis, cellulase 6040.
 ethyl 3-oxocutanoate, 1-(1,3-dithian-2-yl)-2-oxopropane, reduction, formation, 3-hydroxybutanoate, 1-(1,3-dithian-2-yl)-2-hydroxypropane 8631.
 infection, *Citrus vulgaris* var. *fluitans*, chemical analysis 2031.
 flies, *Cytophaga*, *Arthrobacter*, *Streptomyces griseus*, single-cell protein production 6815.
 L-phenylalanine conversion, phenethyl alcohol production, cheese ripening 6993.
 single-cell protein production, use, rapeseed oil, palm oil 872.
 virulence, plant diseases, extracellular enzymes activity 7128.
Germ tubes,
 formation, *Erysiphe pisi*, relationship, direct light, comparison, *Pisum sativum* leaves light penetration 2774.
 formation, Paracoccidioides brasiliensis viability determination methodology 2535.
 formation, spore germination, imidazoles, antifungal activity, *Trichophyton mentagrophytes* 5738.
 penetration, *Erysiphe graminis* f.sp. *hordei*, powdery mildew, host-pathogen interactions, *Hordeum vulgare* 8788.
Puccinia graminis f.sp. *tritici*, lectins, host-pathogen interactions, rust, *Triticum aestivum* 8092.
 yeasts, API test detection 2528.
Germ, Fed. Rep.,
Humulus lupulus, American hop latent virus incidence 6260.
Germicides,
 viruses inactivation 1347.
Germination,
 conidia, *Neurospora crassa*, protein biosynthesis 3478.
 Medicago sativa seeds, *Rhizobium meliloti* growth, *Verticillium wilt*, fungicides

Germination, (continued)

effects on 1211.
 pollen, *Citrus limon*, fungi filtrates effects on 2800.
Triticum aestivum, black point, *Alternaria alternata*, effects on 8800.
Germplasm,
Arachis hypogaea cultivars, disease resistance, peanut mottle virus infection 8061.
Cucumis melo, disease resistance, *Fusarium oxysporum* f.sp. *melonis* infection 313.
 disease resistance, plant breeding, *Brassica campestris* 8065.
 disease resistance, plant diseases, plant breeding 1185.
 disease resistance, *Pseudomonas solanacearum*, wilt, *Solanum esculentum*, *Solanum tuberosum* 8090.
 plant breeding, disease resistance, *Erwinia carotovora*, soft rot, *Solanum tuberosum* 7210.
 plant breeding, disease resistance, *Erysiphe graminis* f.sp. *hordei*, powdery mildew, *Hordeum spontaneum* 5496.
 screening, disease resistance, *Ascochyta blight*, plant breeding, *Cicer arietinum* 8093.
Trifolium hybridum, infection, bean yellow mosaic virus, clover yellow vein virus 1112.
Triticum, analysis, *Septoria tritici* leaf blotch pathogenesis 257.
 viruses infection, *Solanum tuberosum* 8882.
 Zea mays, comparison, disease resistance, maize dwarf mosaic virus 8091.
Ghosts,
 adsorption, viruses, isolation, water 6750.
Gibberia imperatae sp. nov.,
 plant diseases, Imperata, characterization 7950.
Gibberella zae,
 ear rot disease resistance screening projects, Zea mays 4580.
 ear rot, disease resistance, zealarone, 4-deoxyvinaleol, production, hybrids, plant breeding, Zea mays 1180.
 symptomless infection, Zea mays seeds, role, disease resistance, *Pythium debaryanum* infection 8792.
Gibberella acid,
 biosynthesis, whey fermentation, *Fusarium moniliforme*, mathematical models 5970.
Gibberellins,
 foliar application, disease control, *Pythium myriophyllum*, root rot, *Arachis hypogaea* 322.
 production, *Streptomyces*, *Bacillus*, *Azotobacter* 8229.
 roots levels, *Bradyrhizobium japonicum* nodulation, nitrogen fixation, *Glycine max* 8242.
Gibberella zae,
 root rot, effects on carboxin translocation Zea mays 259.
Gigaspora,
 + *Glomus*, mixed culture, methodology, reviews 828.
 identification, use, fluorescent antibody test 3360.
 inoculum production, reviews 826.
 plants roots, measuring techniques, reviews 825.
 population levels, roots colonization, plantations, *Coffea arabica* 5626.
 + roots, comparison, vesicles, use, inoculum 2153.
 ultrastructure, microscopy, fixation methodology, reviews 834.
Gigaspora calospora,
 spore germination, hyphae growth, temperature effects on 402.
Gigaspora decipiens,
 inoculum potential, competition, *Glomus tenue*, *Glomus fasciculatum*, plants 8973.
 inoculum potential, plants 8972.
Gigaspora erythropha sp. nov.,
 vesicular-arbuscular mycorrhizas, soil isolates 6349.
Gigaspora gigantea,
 vesicular-arbuscular mycorrhizas, inoculum production, *Allium cepa* 4632.
Gigaspora heterogama,
 sporulation, phosphate soil amendment induction, *Paspalum notatum* 2134.
Gigaspora margarita,
 growth, in vitro, tissue culture, *Prunus avium* 5926.
 roots colonization, calcium oxide, soil amendment effects on soil pH, Zea mays 5629.
 roots colonization, *Malus domestica* 8218.
 sporulation, phosphate soil amendment induction, *Paspalum notatum* 2134.
 vesicular-arbuscular mycorrhizas, *Meloidogyne incognita*, mixed infection, phosphorus interaction, *Lycopersicon esculentum* 371.
 vesicular-arbuscular mycorrhizas, sporulation, colonization roots, pure culture, *Lycopersicon esculentum* 8481.
Glivocarcin M,
 identification, physicochemical properties 6580.
Glivocarcin V,
 identification, physicochemical properties 6580.
Streptomyces glivotonareus, derivatives biosynthesis 954.
Gingivitis,
 oral hygiene effects on, maxilla surgery, man 6726.
Gladulosis,
 corn rot, *Fusarium*, disease resistance 2063.
Glass,
 association, ammonium, use, disinfection, water 7527.
 containers, shake culture, silicone coatings effects on *Penicillium cyclopium* adherence 835.
Glass beads,
 carriers, *Mycoplasma gallisepticum* culture methodology 1571.
Gleditsia triacanthos var. inermis,
 Nectria cinnabarina canker, susceptibility, benomyl, disease control 3915.
Gliocladium,
 biodegradation, postal stamps paper 3649.
 composts, suppression, damping-off, *Rhizoctonia solani*, *Raphanus sativus* 290.
 composts, suppression, damping-off, *Rhizoctonia solani*, *Raphanus sativus* 290.
 mycotoxins, levels, Roquefort cheese, Egypt 7058.
Gliocladium roseum,
 antagonism, *Rhizobium* growth, in vitro 7248.
 biodegradation, polyurethane, characterization 1034.
 hyperparasitism, biological control, *Rhizoctonia solani*, mycelia soil amendment, *Solanum tuberosum* 2089.
Gliocladium virens,
 carriers, biological control, *Rhizoctonia solani* 8919.
Globodera rostochiensis,
 biological control, pathogens, observation methods, fungi 5224.
 fungicides, soil amendment, disease control, *Solanum tuberosum* 8121

Globomycin,effects on *Escherichia coli* outer membranes, resistant mutant formation 6556.**Gloeocerospora sorghi**,sheath blight, pathology, *Sorghum bicolor* 4518.**Gloeophyllum abietinum**,brown rot, wood decay, *Pinus* 8947.**Glomerella cingulata**,anthracnose, fruit rot, *Fragaria*, USA, Florida 8047.

2-methyl-2-aryloxyacetic acids reduction 8681.

Glomus,

Gigaspora, mixed culture, methodology, reviews 828.

inoculum potential, colonization, roots density, *Medicago truncatula* 8217.

inoculum production, reviews 826.

mixed infection, tobacco mosaic virus, *Lycopersicon esculentum*, electron microscopy 4535.

plants roots, measuring techniques, reviews 825.

population levels, roots colonization, plantations, *Coffea arabica* 5626.

+roots, comparison, vesicles, use, inoculum 2153.

spores, soil, Israel 6337.

symbiosis, *Agropyron smithii*, effects on water relations 6342.

taxonomy, ecological distribution, geographical distribution, Canada 8166.

ultrastructure, microscopy, fixation methodology, reviews 834.

vesicular-arbuscular mycorrhizas, inoculation, nutrient uptake, growth, *Hordeum*vulgare, *Zea mays*, *Pisum sativum* 7257.

vesicular-arbuscular mycorrhizas, inoculation, stimulation growth, latex levels,

Parthenium argentatum 5622.**Glomus caledonium**,

colonization, organic matter 6344.

mycorrhizas, inoculation, roots colonization, competition, plants 5568.

protection *Phytophthora fragariae*, red core, *Fragaria vesca* 5448.

soil survival 5644.

spore germination, hyphae growth temperature effects on 402.

Glomus caledonius,inoculum density, effects on nutrient uptake, *Trifolium repens* 8214.+ *Rhizobium meliloti*, effects on growth, *Medicago sativa* 6341.**Glomus clarum**,

endomycorrhizas, inoculation, roots colonization, competition, plants 5568.

sporulation, phosphate soil amendment induction, *Paspalum notatum* 2134.**Glomus epigaeum**,

vesicular-arbuscular mycorrhizas, soil temperature effects on colonization, USA,

Kansas, *Trifolium aestivum* 7259.**Glomus epigaeus**,

effects on host plants growth, association, clays media 2136.

inoculum density, effects on nutrient uptake, *Trifolium repens* 8214.**Glomus etunicatus**,symbiosis, *Citrus macrophylla*, effects on viruses plant diseases pathogenesis

8235.

Glomus fasciculatum,effects on *Rhizobium leguminosarum* var. *trifolii* nodulation, *Trifolium*

subterraneum 5615.

enhancement, *Pelargonium*, growth 2944.enhancement, *Trifolium subterraneum*, *Pelargonium*, growth, association, phosphorus

2943.

hyphae formation, phosphorus effects on, *Trifolium* 8934.hyphae, ultrastructure, roots, *Trifolium repens* 8226.hyphae, ultrastructure, *Trifolium repens* roots 381.inoculation, *Eleusine coracana*, greenhouses screening 2145.inoculation, growth stimulation, soils (saline), *Lycopersicon esculentum* 5616.inoculum potential, colonization, roots density, *Trifolium subterraneum*, *Medicago**truncatula* 8217.inoculum potential, competition, *Glomus tenue*, *Gigaspora decipiens*, plants 8973.

inoculum potential, plants 8972.

pH, ammonium nitrate ratio effects on, phosphorus, nutrient uptake, roots

colonization, *Chrysanthemum morifolium* 5642.+ *Rhizobium*, + phosphate, inoculation, *Vigna unguiculata*, *Cajanus cajan* 2945.roots colonization, *Malus domestica* 8218.

vesicular-arbuscular mycorrhizas, inoculation, crop fields soil, field trials

7253.

vesicular-arbuscular mycorrhizas, inoculation, yield, citrus 3932.

vesicular-arbuscular mycorrhizas, stimulation growth, nutrient uptake, *Arachis**hypogaea* 5641.**Glomus fasciculatus**,enhancement, growth, *Glycine max*, symbiosis 2135.inoculation, growth stimulation, *Chrysanthemum morifolium* 1269.symbiosis, *Hippophae rhamnoides* 2927.vesicular-arbuscular mycorrhizas, \pm *Rhizobium*, inoculation, yield, *Leucaena**leucocephala* 7276.

vesicular-arbuscular mycorrhizas, inoculation, +fertilization, effects on growth,

Fraxinus americana, *Juglans nigra* 7229.vesicular-arbuscular mycorrhizas, inoculum production, *Allium cepa* 4632.

vesicular-arbuscular mycorrhizas, phosphate nutrient uptake, interaction

nitromyrrhizas nitrogen fixation, *Hippophae rhamnoides* 6243.**Glomus intraradices**,nutrient uptake, phosphorus, water conductivity, transpiration, *Citrus* 8216.symbiosis, seedlings, *Citrus aurantium*, *Poncirus trifoliata* \times *Citrus sinensis*,

association, photosynthesis distribution 8219.

Glomus macrocarpum,soil aeration, carbon dioxide effects on symbiosis, *Eupatorium odoratum*, *Guizotia**abyssinica*, *Sorghum bicolor* 3937.**Glomus macrocarpus**,

effects on host plants growth, association, clays media 2136.

infection, daylight effects on, *Eupatorium odoratum*, *Guizotia abyssinica* 8977.infection, light intensity effects on, *Eupatorium odoratum*, *Capsicum annuum* 8975.nutrient uptake, soil aeration effects on, *Eupatorium odoratum*, *Sorghum bicolor*,*Guizotia abyssinica* 1256.

vesicular-arbuscular mycorrhizas, inoculation, soil temperature, oxygen effects

on, growth, *Eupatorium odoratum* 7256.vesicular-arbuscular mycorrhizas, inoculum production, *Allium cepa* 4632.**Glomus manihoti**,inoculation, fertilizers requirements, yield, *Manihot esculenta* 2934.**Glomus margarita**,vesicular-arbuscular mycorrhizas, inoculum production, *Allium cepa* 4632.**Glomus monosporum**,

vesicular-arbuscular mycorrhizas, inoculation, crop fields soil, field trials

7253.

Glomus monosporus,

effects on host plants growth, association, clays media 2136.

Glomus mosseae,*Allium cepa* resistance, heavy metals soil pollution 383.

colonization, organic matter 6344.

effects on *Rhizobium leguminosarum* var. *trifolii* nodulation, *Trifolium*

subterraneum 5615.

growth models, symbiosis, roots, *Allium porrum* 3934.inoculation, stimulation phosphorus uptake, seedlings growth, *Malus domestica*

3942.

nitrogen uptake, *Apium graveolens* 1259.nutrient uptake, soil aeration effects on, *Eupatorium odoratum*, *Sorghum bicolor*,*Guizotia abyssinica* 1256.protection *Phytophthora fragariae*, red core, *Fragaria vesca* 5448.+ *Rhizobium*, inoculation, growth stimulation, *Acacia holosericea*, *Acacia radialis*

6355.

+ *Rhizobium* inoculation, nitrogen fixation, fertilizers effects on, *Trifolium*repens, *Allium porrum* 5628.+ *Rhizobium meliloti*, effects on growth, *Medicago sativa* 6341.+ *Rhizobium*, symbiosis, effects on, *Acacia holosericea*, *Acacia reddiana*, growth

8969.

roots, carbon sources, phosphate, roots, mycelia, *Acer pseudoplatanus* 5555.roots colonization, calcium oxide, soil amendment effects on soil pH, *Zea mays*

5629.

roots colonization, *Malus domestica* 8218.sporulation, phosphate soil amendment induction, *Paspalum notatum* 2134.vesicular-arbuscular mycorrhizas, *Allium porrum*, effects on copper uptake 384.vesicular-arbuscular mycorrhizas, + *Azospirillum brasilense*, inoculation, nitrogenfixation, nutrient uptake, yield, *Zea mays*, *Lolium perenne* 1257.vesicular-arbuscular mycorrhizas, *Meloidogyne incognita*, mixed infection,phosphorus interaction, *Lycopersicon esculentum* 371.

vesicular-arbuscular mycorrhizas, phosphate fertilizers interaction, effects on

Medicago sativa 3946.

vesicular-arbuscular mycorrhizas, soil temperature effects on colonization, USA,

Kansas, *Triticum aestivum* 7259.**Glomus tenue**,inoculum potential, competition, *Glomus fasciculatum*, *Gigaspora decipiens*, plants

8973.

inoculum potential, plants 8972.

 β -D-Glucan,biodegradation, *Rhizopus* exo-1,3- β -D-glucanase 3670.carbohydrate composition, antifungal antibiotics, structure, *Grifola frondosa*

5208.

structure, *Grifola frondosa* 6057.1,6- α -Glucan branching enzyme,purification, characterization, *Streptococcus* mutants 27.**D-Glucan**,substrate specificity, *Streptococcus* mutants 6830.1,3- α -D-Glucan synthase,isoelectric focusing, *Streptococcus* mutants 28.1,6- α -D-Glucan synthase,isoelectric focusing, *Streptococcus* mutants 28.**1,3- β -D-Glucanase**,biosynthesis, cyclic AMP regulation, *Bacillus circulans* 6036.**1,6- β -D-Glucanase**,biosynthesis, cyclic AMP regulation, *Bacillus circulans* 6036.**Glucans**,biosynthesis, enzymes, ribocitrin, effects on, *Streptococcus* mutants 3157.biosynthesis inhibition, *Pauparula sphaerosperma papulacandin* B, *Saccharomyces**cerevisiae*, *Candida albicans* 1440.biosynthesis, ribocitrin, inhibition, *Streptococcus* mutants 3155.biosynthesis, *Streptococcus* mutants 109.*Grifola frondosa* fruit bodies, antifungal activity, *Sarcoma* 180, mice 6891.hydrolysis, chemical modification, *Candida guilliermondii*, *Saccharomyces**cerevisiae* 6942. **β -Glucans**,batch culture, continuous culture, industrial applications, *Alcaligenes faecalis*var. *xyloxygens* 8621.biosynthesis, *pauparacandin* B, effects on, *Schizosaccharomyces pombe* 2223. **β -D-Glucans**,

Ganoderma applanatum, biosynthesis, antifungal activity 2637.

structure, *Agrobacterium*, *Rhizobium* 948.**1,3- β -D-Glucans**,

hydrolysis, yeasts membranes, glycosylation 1883.

Glucosaccharinic acid,biodegradation, *Ancylolobacter* 2717.**Glucanate 2-dehydrogenase**,purification, characterization, *Glucanobacter dioxycetonicus* 8592.**Glucanobacter dioxycetonicus**,

glucanate 2-dehydrogenase, purification, characterization 8592.

Glucanobacter oxydans,

acetic acid bacteria succession, wine fermentation, storage 6134.

malt, malolactic fermentation, ethanol fermentation, *Acetobacter aceti*, musts,

malolactic fermentation, ethanol fermentation 6935.

sorbitose production, sorbitol conversion 4358.

Glucanobacter suboxydans,

immobilized cells, D-arabitol conversion, D-xylulose production 949.

D-Glucosamine,prevention, feedback inhibition, dextranase biosynthesis, *Lipomyces starkeyi*

4331.

Glucosaminophosphate isomerase,purification, characterization, *Escherichia coli* 6841.**Glucosaminophosphate isomerase (glutamine-forming)**,

bacteria, antiscapin, inhibition 8382.

Glucosamines,

levels, biomass measuring techniques, fungi 6791.

Glucose,addition, blood culture, *Streptococcus viridans* 2497.*Agrobacterium tumefaciens*, polysaccharides biosynthesis, role lipids 6886.

ammonium tartrate, degradation, media (culture), liquid culture, sterilization,

autoclaves 6490.

batch culture, fermentation, glucose, acetone, *Clostridium acetobutylicum* 3545.

bicarbonate, acetic acid, effects on, digestion (anaerobic), waste treatment

3191.

carbohydrate catabolism, effects on aflatoxins biosynthesis, *Aspergillus*

parasiticus 8723.

ucose, (continued)

carbon sources, nutrient concentrations, aeration, 2,3-butanediol production, *Klebsiella pneumoniae* 3547.

cellobiose, xylose, mixtures, ethanol production, mixed culture, *Clostridium saccharolyticum*, *Zymomonas anaerobius* 8661.

conversion, maltose, isomaltose, kinetics, exo-1,4- α -D-glucosidase, *Rhizopus niveus*, *Aspergillus niger* 3464.

effects on β -D-galactosidase activity, *Vibrio cholerae* 8609.

effects on *Thermomonospora fusca* β -D-glucosidase activity 1796.

feedback inhibition, cellulose hydrolysis, cellulase, *Thermomonospora* 8692.

feeding, *Escherichia coli* batch culture, electrodes monitoring 676.

fermentation, butanol production, *Clostridium* 5236.

fermentation, *Escherichia coli*, effects on cloacin excretion 2688.

fermentation, ethanol, *Candida wickerhamii* 985.

fermentation, ethanol extraction, *Saccharomyces cerevisiae* 5276.

fermentation, ethanol production, batch culture, *Zymomonas mobilis* 3602.

fermentation, ethanol production, carrageenans immobilized cells, *Zymomonas mobilis* 5300.

fermentation, ethanol production, factors affecting, *Saccharomyces carlsbergensis* 7815.

fermentation, ethanol production, fermenters, immobilized cells, *Saccharomyces cerevisiae* 3606.

fermentation, ethanol production, *Saccharomyces cerevisiae* 8655.

fermentation, glucose effects on, batch culture, *Clostridium acetobutylicum* 3545.

fermentation, glycerol, production, *Pichia farinosa* 3609.

fermentation, isocitric acid production, *Candida savautii* 5961.

fermentation, lactic acid production, reactors, *Lactobacillus delbrueckii* 864.

fermentation, limiting factors, dairy starters, *Streptococcus lactis* 6994.

fermentation, methanogenesis, Michaelis-Menten parameters, methanogenic bacteria 8266.

fermentation, production, acetone, butanol, batch culture, *Clostridium acetobutylicum* 4383.

fermentation, products, pH, effects on, *Bacillus macerans* 2690.

fermentation, sensors 3530.

fermentation, sensors 3531.

fermentation, 1-butanol production, *Clostridium cochlearium*, *Clostridium tetanomorphum* 8648.

fermentation, 2,3-butanediol production, *Bacillus polymyxa* 7792.

formation, *Trichoderma* hydrolysis cellulose, kinetics mathematical models 1798.

Fusarium oxysporum fermentation 1860.

isomerase, activity, *Zymomonas mobilis* 6878.

isomerization, fructose, bioreactors 8534.

isomerization, microorganisms, immobilized enzymes, sweeteners production, starch, *Zea mays* 5188.

isomerization, xylose isomerase, immobilized enzymes, high-fructose corn syrup production 5145.

lignocelluloses, cell walls, steam disruption, cellulase hydrolysis 5278.

metabolism, bacteria, counting methods, food contamination 6177.

nutrient deficiency, growth, mathematical models, computer applications, *Escherichia coli* 4173.

oxidation, immobilized enzymes, *Aspergillus niger* glucose oxidase, catalase, liver, cattle 2578.

production, β -amylase reviews, α -D-glucosidase applications, *Bacillus licheniformis*, *Bacillus amyloliquefaciens* 4360.

production, cellulase, hydrolysis, hardwoods 5160.

production, cellulose conversion, cellulase activity, *Trichoderma* 14.

production, *Gossypium hirsutum* cellulose conversion, *Viticellium witt*, cellulase 3683.

residues, identification, aspartyl-tRNA synthetase, *Saccharomyces cerevisiae* 907.

ribose xynose synthesis, effects on, *Bacillus subtilis* 1411.

soil microorganisms biodegradation, soil pollution effects on, calorimetry 2933.

specificity, hexokinase, catalysis, *Saccharomyces cerevisiae* 6853.

uptake, *Ceratobasidium cornigerum*, symbiosis, *Goodyera repens*, *Dactylorhiza purpurella* 5645.

isomerization, bioreactors, *Streptomyces phaeochromogenes*, immobilized cells, comparison, glucose isomerase, immobilized enzymes, characterization 7746.

ucose isomerase, activity, immobilization, radiation polymerization, *Streptomyces phaeochromogenes* 5178.

extracellular enzymes, characterization, *Chaetium* 7742.

immobilized enzymes, comparison, *Streptomyces phaeochromogenes*, immobilized cells, D-glucose, isomerization, bioreactors, characterization 7746.

immobilized enzymes, reactors, mass transfer, mathematical models, *Streptomyces* 5168.

production, bacteria, characterization 2618.

production, temperature, U.V. radiation, mitylmycin C, acriflavin, effects on, *Streptomyces fraidae* 8598.

ucose metabolism, immobilization, growth, mathematical models, *Saccharomyces cerevisiae* 6121.

single-cell protein production, mathematical models, *Chaetium cellulyticum* 5958.

ucose oxidase, *Aspergillus niger*+catalase, immobilized enzymes, glucose oxidation, liver, cattle 2578.

Aspergillus niger, association, *Caldarium fumago*, chloride peroxidase, use, bioreactor, chemical cell, chemicals synthesis 6076.

Aspergillus niger mycelia, immobilization 1739.

control, *Salmonella* growth, poultry contamination 7843.

food industry, fungi 55.

immobilization, effects on activity, stability, *Penicillium vitale* 7743.

immobilization methodology 4300.

immobilized enzymes, activity, stability, *Aspergillus niger* 1770.

immobilized enzymes, bioreactors optimization 7735.

ucose-6-phosphate, levels, relationship streptothricin biosynthesis, *Streptomyces noursei* 7470.

residues, identification, aspartyl-tRNA synthetase, *Saccharomyces cerevisiae* 907.

ucose-6-phosphate isomerase, activity, *Streptomyces phaeochromogenes* immobilization, radiation polymerization 6027.

synthesis, *Streptomyces albus*, shake culture 3520.

D-Glucosidase, active sites, histidine residues chemical modification, *Saccharomyces cerevisiae* 6851.

activity, wort fermentation, ethanol production 5287.

 α -D-Glucosidase, (continued)

applications, β -amylase reviews, maltose, glucose production, *Bacillus licheniformis*, *Bacillus amyloliquefaciens* 4360.

biotechnology, reviews, microorganisms 2596.

gene expression, *Saccharomyces cerevisiae* 3442.

Lactobacilli acidophilus, biosynthesis, physicochemical properties 98.

nodules, Glycine ma, symbiosis, *Bradyrhizobium japonicum* 6363.

purification, characterization, electrophoresis, *Bacillus stearothermophilus* 6638.

β -D-Glucosidase, activity, cellobiose biodegradation, soil microorganisms 3672.

activity, effects on dairy products shelf life, *Pseudomonas fluorescens* 6197.

activity, role cellulose biodegradation, immobilized cells, *Alcaligenes faecalis* 5190.

cellobiose hydrolysis, *Thermoanaerobacter ethanolicus* 3493.

characterization, *Cellulomonas fimi* 6833.

characterization, *Trichoderma longibrachiatum* 4346.

enhancement, role, methyl- β -D-glucoside, cellobiose, *Streptomyces griseus* 4345.

enzymatic activity production, *Cellulomonas* growth, carbohydrates substrates 32.

excretion, carbon sources, cellobiose, cellulose effects on, *Schizopyllum commune* 8874.

extracellular, production, liquid culture, *Penicillium funiculosum* 919.

Humicola, characterization 1740.

immobilization, use textiles, hydrophobicity 5142.

immobilized enzymes, characterization 3491.

immobilized enzymes, interaction, *Zymomonas mobilis* immobilized cells 18.

immobilized enzymes, kinetics, polymers solubility, *Penicillium funiculosum* 5134.

induction activity, mycelia, *Trichoderma reesei* 4298.

induction analysis, Monilia 5184.

kinetics, substrates affinity, *Aspergillus oryzae* 1787.

microorganisms, reviews 8567.

overproduction, *Sporichium pulverulentum*, mutants, characterization 878.

Penicillium funiculosum, hydrolysis cellulose 877.

production, *Aspergillus phoenicis* 3445.

production, mutants, *Alternaria alternata* 3453.

production, mutants, *Alternaria alternata* 3463.

purification, activity, bioassays, fungi 5166.

purification, characterization, conidia, fruit bodies, *Termitomyces* 6844.

purification, characterization, *Trichoderma longibrachiatum* 4342.

purification, characterization, *Trichoderma longibrachiatum* 7744.

purification, *Trichoderma longibrachiatum* 5991.

Saccharomyces cerevisiae, immobilized cells+immobilized enzymes, cellobiose conversion, ethanol production 8664.

Solanum laciniatum glycoalkaloids hydrolysis, *Aspergillus* 1006.

thermal stability, *Thermomonospora* 4344.

thermal stability, *Thermomonospora* 5973.

Thermomonospora fusca, activity, saccharides effects on 1796.

Glucosinol, rapeseed meals, biodegradation, *Bacillus cereus*, *Trichosporon cutaneum* 1042.

β -D-Glucuronidase, assays, gas chromatography, *Escherichia coli* 3762.

inhibitors, purification, characterization, *Micromonospora* 5105.

Glume blotch, *Septoria nodorum*, disease resistance components. *Triticum aestivum* seedlings 302.

Septoria nodorum, disease resistance, plant breeding, *Triticum aestivum* 2833.

Septoria nodorum, *Triticum aestivum* seedlings, factors affecting 7149.

Glutamate dehydrogenase, immobilized enzymes, characterization, *Aspergillus ochraceus* 92.

nitrogen sources metabolism, regulation chloramphenicol biosynthesis, *Streptomyces venezuelae* 4854.

L-Glutamate oxidase, biochemical characteristics, *Streptomyces violaceus* 3483.

Streptomyces, purification, characterization 2574.

use assays, glutaminase, aminopeptidase (cytosol), koji, *Aspergillus oryzae* 7853.

Glutamate synthase, nitrogen sources metabolism, regulation chloramphenicol biosynthesis, *Streptomyces venezuelae* 4854.

Glutamic acid, nitrogen sources, association, *Rhodospirillaceae* hydrogen production, use, organic acids 1843.

overproduction, metabolic pathways, reviews, *Corynebacterium glutamicum* 7667.

production, fermentation, optimization, mathematical models, *Brevibacterium divaricans* 5964.

uptake, cooling water, temperature effects on, heterotrophic bacteria 1493.

L-Glutamic acid, overproduction, mutants, transformation, *Brevibacterium lactofermentum* 5116.

Glutamine, activity measurements, calorimetry methodology, soil 8212.

koji, assays, use L-glutamate oxidase, *Aspergillus oryzae* 7853.

purification, characterization, *Saccharomyces cerevisiae* 6866.

Glutamine, inhibition, penicillin chrysogenum, penicillin, biosynthetics 4049.

Glutamine synthase, gross-reactivity, *Rhizobium leguminosarum*, *Pisum sativum* nodules 3956.

Glutathione reductase, *Mycobacterium avium*, purification, characterization 5119.

purification, characterization, *Aspergillus niger* 8597.

purification, characterization, *Nitrobacter agilis* 6002.

Glutaminopine, isolation, crown gall tumors, *Agrobacterium tumefaciens* 2810.

Glutathione, antibacterial activity, surfactants effects on 9261.

biodegradation, acclimatization, activated sludge 4112.

fixation, erythrocytes, adenovirus (human), hemagglutination 2440.

sterilization, disinfection 1362.

Glutathione, protein structure, tertiary structure, homology, thioredoxin, *Escherichia coli*, page 74 7666.

Glutathione, biosynthesis, role detoxification, captan resistance, *Botrytis cinerea* 8297.

Glutathione peroxidase, detection, molds 1789.

Glutathione reductase (NAD(P)H), erythrocytes, man, amino acid sequence homology, dihydropyrimidine dehydrogenase, *Escherichia coli* 6004.

- Glutathione synthetase**, purification, characterization, *Escherichia coli* 6849.
- Glyceollin**, antifungal activity, *Phytophthora megasperma* f.sp.glyciniae 1207.
- Glycera dibranthica**, hemocoel, body fluids, bactericides, bactericidal activity, *Serratia marcescens* 451.
- L-(5)-Glyceraldehyde acetonide**, stereo selectivity, association, β -lactam antibiotics, intermediates, synthesis 3173.
- Glycerate-3-phosphate dehydrogenase**, activity, NAD analogs binding, *Bacillus stearothermophilus* 1790. cysteine residues, NAD⁺ fluorescent probes photoaffinity labelling, yeasts 892.
- Glycerol**, potassium tartrate, density gradients, separation techniques, viruses, feces, man 1555. production, deficient mutant, alcohol dehydrogenase, *Saccharomyces cerevisiae* 3642. production, fermentation, yeasts 7770. production, glucose, fermentation, *Pichia farinosa* 3609.
- Glycerol dehydrogenase**, purification, characterization, *Cellulomonas* 8591.
- Glycerol kinase**, purification, characterization, molecular weight, *Microsporium gypsum*, *Epidermophyton floccosum* 5987.
- Glycerophosphate**, Tris, use, media (culture), bacteria 7579.
- Glycine**, stimulation proteins excretion, *Bacillus mesentericus* 1725.
- Glycine betaine**, effects on sodium chloride tolerance, *Rhizobium meliloti* nitrogen fixation 2159. enhancement, nitrogenase, biosynthesis, osmotic stress, inhibition, nitrogen fixation, *Klebsiella pneumoniae* 6354.
- Glycine max**, association, *Bradyrhizobium japonicum*, sulfur dioxide, nitrogen dioxide, effects on, growth 8992. *Basidiomycetes* plant diseases, pathogenesis 1111. bean pod mottle virus, disease transmission, population density, *Ceratomya trifurcata* distribution 243. beans, juices, sugars fermentation, lactic acid, *Lactobacillus cellobiosus* 5316. beans, juices, sugars fermentation, *Lactobacillus cellobiosus* 6980. biodegradation, soil nitrogen-15 levels association 2959. blight, *Fusarium oxysporum*, disease reservoirs, weeds 8770. blight, *Pseudomonas syringae* pv.glyciniae, epidemiology 3799. *Bradyrhizobium japonicum* inoculation effects on seeds yield, nitrogen, genetic variance, inheritance 5660. *Bradyrhizobium japonicum* nodulation, nitrogen fixation, infection, bean pod mottle virus, soybean mosaic virus, effects on 7140. *Bradyrhizobium japonicum* strains inoculum, nodulation, nitrogen fixation, seeds protein composition 8247. bud blight, cowpea severe mosaic virus, Brazil 6228. buds proliferation, plant viruses infection, *Scaphomyces caesus* disease transmission, USA, Louisiana 4510. cell culture, hydroxymethylglutaryl-CoA reductase activity, *Phytophthora megasperma* f.sp.glyciniae cell walls effects on 5507. cell culture, phytoalexins production, host-pathogen interactions, *Pseudomonas syringae* infection 2058. charcoal rot, *Macrophoma phaseolina*, *Bradyrhizobium japonicum*, rhizobitoxine, role, protection 4509. *Corynebacterium flaccumfaciens* tan spot, epidemiology, USA, Iowa 248. cotyledons, nodulation, light inhibition, *Bradyrhizobium japonicum* 6248. cyclic AMP infection, *Phytophthora megasperma* f.sp.glyciniae infection 2782. disease resistance *Rcs* gene, *Cercospora soja* leafspot 1172. disease tolerance, rot, *Phytophthora megasperma* f.sp.glyciniae 8086. downy mildew, *Peronospora manshurica* races virulence, disease resistance, Rpm gene 1202. downy mildew, *Peronospora manshurica*, surveys, USA, Iowa 7937. energy balance, nitrogen fixation, nitrogenase, nodules respiration, *Rhizobium* 8251. fruiting, nitrogen fixation, *Rhizobium japonicum* 2154. fungi infection, pathogenicity 240. fungicides foliar applications, prophylaxis, disease control, plant diseases, USA, Georgia 8118. gibberellins, roots levels, chloremquat chloride, effects on nitrogen fixation, nodulation, *Bradyrhizobium japonicum* 8242. Glomus fasciculatus, enhancement, growth, symbiosis 2135. host-pathogen interactions, α -mannans localization, hyphae, *Phytophthora megasperma* f.sp.glyciniae 7941. interspecific relationships, regulation, nodulation, *Bradyrhizobium japonicum* 8997. isolation, *Phytophthora megasperma* f.sp.glyciniae races, new taxa, USA, Mississippi 7935. leaves, *Pseudomonas glyciniae* disease resistance, hypersensitive response 319. lectins, agglutination, *Bradyrhizobium japonicum* 3953. melituzin resistance, *Rpe1* gene, linkage, disease resistance Hm gene, rot, *Phytophthora megasperma* f.sp.glyciniae 2064. nitrogen fixation, acetylene reduction, nodulation, mutants, *Rhizobium* 2989. nitrogen fixation, acetylene reduction, relationship ureides levels, environmental factors 2162. nitrogen fixation, nodulation, herbicides, fungicides seed treatments effects on, inoculation, *Bradyrhizobium japonicum* 8938. nitrogen fixation relationship, carbohydrates contents 2992. nitrogen fixation, *Rhizobium japonicum*, soil salinity effects on 2163. nitrogen fixation, *Rhizobium*, nitrogen-15, measuring techniques, crop fields 7289. nitrogen-fixing bacteria symbiosis, characterization 1279. nitrogen-15, translocation, leaves, seeds, nitrogen fixation inhibition, *Bradyrhizobium japonicum* 6370. nodulation, *Bradyrhizobium japonicum*, relationship, rhizosphere, response 4641. nodulation, *Bradyrhizobium japonicum* 6379. nodulation competition, *Rhizobium japonicum*, *Rhizobium leguminosarum*, rhizosphere 2967. nodulation, histopathology, *Rhizoctonia solani*, m-hydroxyphenylacetic acid, m-methoxyphenylacetic acid, effects on 1119. nodulation, inoculation, *Rhizobium* 6371.
- Glycine max**, (continued) nodulation, inoculation, *Rhizobium japonicum* 2952. nodulation, nitrogen fixation, *Azotobacter*+fungi+*Rhizobium japonicum* mixed culture effects on 2172. nodulation, *Rhizobium japonicum* strains competition 408. nodulation, root hairs infection, role *Rhizobium japonicum*, capsules polysaccharides, *Glycine max* 2970. nodulation, seed treatments, carbofuran+*Rhizobium* inoculation 2990. nodules, *Bradyrhizobium japonicum* 6362. nodules, *Bradyrhizobium japonicum* bacteria bacteroids, denitrification pathway 8995. nodules, nitrogen fixation, acetylene reduction measurement, acetylene concentrations 7293. nodules, nitrogen fixation, respirometry, measuring techniques 324. nodules, nitrogen fixation, urate oxidase subunits, *Rhizobium* infection 4668. nodules, nitrogen-15 levels, nitrogen fixation, *Rhizobium japonicum* 2169. oil cake extracts, media (culture), *Saccharomyces cerevisiae* 8485. phylloids, mycoplasma-like organisms, leaves lesions, ultrastructure 7752. phytoplane, fungi, *Azotobacter chroococcum*, secretions, effects on 8273. phytoalexins production, stimulation, plasma membranes receptors, mycolaminarin *Phytophthora* 2075. phytopathogenic fungi, plant diseases, disease control, pesticide applications association rainfall 1220. *Phytophthora megasperma* f.sp.glyciniae races isolation, distribution, USA Nebraska 246. *Phytophthora* root rot, biological control, *Hypochoerium catenoides* 5510. plant breeding, disease resistance, fungi, bacteria, viruses 5473. plant breeding, disease tolerance heritability, rot, *Phytophthora megasperma* f.sp.glyciniae 8065. plant breeding, disease tolerance selection, rot, *Phytophthora megasperma* f.sp.glyciniae 8079. plant diseases, cowpea middle mottle virus, ultrastructure, leaves cells 4505. proteins, textured soy protein, beef, minced meat, acidification effects on bacteria growth, spoilage 6987. *Rhizobium* inoculation, effects on yield 5677. *Rhizobium japonicum* inoculation methodology, Saudi Arabia 2953. rhizosphere, straw soil amendment effects on, population levels, *Bradyrhizobium* root rot, stem rot, *Phytophthora megasperma* f.sp.glyciniae, virulence, USA, New York 8776. roots age, *Rhizobium japonicum* inoculation, dose-response effects, nodulation 2166. roots, *Bradyrhizobium japonicum* nodulation, penicillin sensitivity 5655. *Sclerotinia sclerotiorum* stem rot, agricultural practices effects on pathogenesis 1120. seed germination, *Rhizobium japonicum* growth, fungi pathogens, pesticides effect on 1212. seed treatments, fungicides 1229. seed treatments, streptomycin+erythromycin+benomyl, stimulation, rhizosphere colonization, *Bradyrhizobium japonicum* 9017. seeds extracts effects on *Saccharomyces cerevisiae* cell culture 5089. seeds, fungal flora, detection, pH, water 289. seeds, oils extraction, proteolytic enzymes, *Bacillus subtilis* 3494. seeds, planting, *Bradyrhizobium japonicum* nodulation, inoculation 6352. seeds, seed-borne diseases, Phomopsis infection, harvesting dates effects on 8778. soybean mosaic virus disease resistance genes, inheritance 2853. soybean mosaic virus infection, disease transmission, Myzus persicae 1973. sterols, fermentation, *Nocardia corallina*, 19-norsteroids intermediates 1823. symbiosis, *Bradyrhizobium japonicum*, nodules, α -D-galactosidase, α -D-glucosidase 6363. ureides levels, indicators, nitrogen fixation, acetylene reduction 2164. vascular system, translocation, nitrogen fixation, *Rhizobium japonicum* 2956. yield, nodulation, *Rhizobium japonicum* inoculation 2122.
- Glycine mottle virus**, new records, host range, spatial distribution, new records, *Glycine tomentella* isolates, Australia 5404.
- Glycine soja**, *Pseudomonas putida*+*Bradyrhizobium japonicum* effects on nodulation, cloning DNA sequence effects on root hairs 6365.
- Glycine tomentella**, glycine mottle virus isolates, new records, host range, spatial distribution, classification, Australia 5404.
- Glycoalkaloids**, hydrolysis, *Solanum laciniatum*, *Aspergillus* B-D-glucosidase 1006. *Solanum laciniatum*, hydrolysis, *Aspergillus* 6155. tubers, levels, effects on *Rhizoctonia solani*, disease resistance, *Solanum tuberosum* 8840.
- Glycoxyaminase**, purification, characterization, peptide mapping, comparison, *Pseudomonas aeruginosa*, *Pseudomonas* 4290.
- Glycol-bis(3-aminooethyl ether)-N, N-tetracetic acid**, effects on bacteria films removal, surfactants 417.
- Glycolic acid**, assays, methodology, use, bacteria acyl type cell walls identification 9299.
- Glycolipids**, Arthrobacter resting cells, biosynthesis, structure, surfactants activity 7777. endotoxins, chemical composition, ultrastructure, *Salmonella minnesota* 4477. fatty acid composition, 3-methoxy octadecanoic acid, *Rhodotorula glutinis* 4382. *Mycobacterium avium*-intracellular-scrofulaceum, identification, thin-layer chromatography 689.
- Oligosaccharides**, carbohydrate composition, structure, *Mycobacterium leprae* 924. production, *Torulopsis bombicola* 5221.
- Surfactants**, production, *Torulopsis bombicola* 1846.
- Glycolysis**, anaerobic conditions, aeration effects on, *Leuconostoc mesenteroides* 854.
- Glycoproteins**, antigenic determinants localization, vaccines production, rabies virus 6632. exo-1,4- α -D-glucosidase starch hydrolysis inhibitors, purification, characterization, *Aspergillus* 3500. gene expression, vaccines production, herpes simplex virus 6611. herpes simplex virus 1, gene expression, antigenic determinants, use vaccines production, cell lines, mammalian cells 6591. membranes, rabies virus, lysosomes incorporation, antibody response, mice 6606. paramfluenza virus 3, crossed immunoelectrophoresis, resolution 8449. rabies virus, gene expression, *Escherichia coli*, genetic engineering, vaccines

ycoproteins, (continued)

production 6621
 receptors, plasma membranes, *Bacillus thuringiensis* subsp. *kurstaki*
 8-endotoxin binding, cytotoxicity, *Choristoneura fumiferana* 5387.
 vaccines production, transmissible gastroenteritis virus 6661.
lysosaminophosphate isomerase (glutamine-forming),
 activity, antipain inactivation, *Escherichia coli*, *Pseudomonas aeruginosa*,
Arthrobacter aureosens, *Bacillus thuringiensis* 6043.
lysoerylation,
 exo-1,4- β -D-xylosidase, p-nitrophenyl- β -D-glucopyranoside,
 p-nitrophenyl- β -D-xylopyranoside, *Aspergillus niger* 4349,
 1,3- β -D-glucans hydrolysis, yeasts membranes 1863.
lysochryza glabra,
 plant extracts, antifungal activity, aflatoxins biosynthesis, *Aspergillus flavus*
 7897.
lysoylate dehydrogenase (acylating),
 purification, characterization, *Sclerotium rolfsii* 3502.
lyphosate,
 effects on growth, *Phytophthora cactorum*, *Erwinia*, antagonism 2177.
 soils (loam) applications, effects on *Trifolium subterraneum* *Rhizobium trifolii*
 nodulation, nitrogen fixation 2995.
MK cells,
 coxsackievirus B isolation, clinical isolates 612.
nomina nervisada,
Carya illinoensis veins spot, pathogenesis, epidemiology, disease control,
 fungicides 1137.
nomonia leptostyia,
 anthracnose, disease resistance, relationship, 5-hydroxy-1,4-naphthoquinone,
 hydroquigone glucoside, *Juglans nigra* 3855.
 anthracnose, epidemics, incidence, *Juglans nigra* plantations, USA, Illinois 7995.
 anthracnose, *Juglans nigra*, growth association 3918.
nomonia rubi,
 canker, *Rubus*, USA, Ohio 8846.
notulobitics (specific pathogen free),
 sheep, *Pasturella haemolytica*+*Clostridium*, vaccines, efficacy, experimental
 infection 7488.
oats,
 Chlamydia infection, agglutination immunodiagnosis 2504.
 milk, bacteria content 6973.
ocitrin,
 rapeseed meals, biodegradation, *Bacillus cereus*, *Trichosporon cutaneum* 1042.
old,
 extraction, ores oxidation, *Thiobacillus ferrooxidans* 3001.
 +immunoglobulin G complexes, immunoelectron microscopy methodology, plant viruses
 detection 6439.
omphrea globosa,
 tomato yellow top virus, disease transmission, *Myzus persicae* 3710.
onorrhea,
 epidemiology, man, *Neisseria gonorrhoeae* auxotyping, serotyping, antibiotic
 sensitivity testing 462.
 genitourinary tract, diagnosis, enzyme immunoassay, *Neisseria gonorrhoeae* 2481.
 immunodiagnosis, enzyme immunoassay 2492.
 immunodiagnosis, passive hemagglutination, *Neisseria gonorrhoeae* ribosomes
 antigens, man 714.
Neisseria gonorrhoeae antibodies detection, radioimmunoassay methodology, man
 1586.
Neisseria gonorrhoeae, *Limulus* lysate test, diagnosis, females, man 3276.
oocyera regens,
 symbiosis, *Ceratobasidium cornigerum*, glucose uptake 5645.
ospyllum,
 biological control, foliar applications, spores persistence, *Bacillus*
thuringiensis 117.
 gram-negative bacteria contamination, climatic conditions effects on disease
 control 4532.
ospyllum arboreum,
 genotypes, disease resistance, *Xanthomonas malvacearum* blight 8059.
ospyllum barbadense,
Alternaria macrospora infection, fungicides disease control, yield association
 blight, transmission (seed) 8037.
 phytoalexins accumulation association *Verticillium dahliae* wilt 2824.
 root rot, *Phymatotrichum* 6280.
 soil nutrients uptake, wilt, *Fusarium oxysporum* f.sp.vasinfestum, interspecific
 relationships, *Meloidogyne incognita* 263.
ospyllum hirsutum,
 aflatoxins, agriculture, fungi, fluorescence, *Aspergillus flavus* 4474.
 blight, transmission (seed) 8037.
 blight, *Xanthomonas campestris* pv.malvacearum, disease control, plant breeding,
 host-pathogen interactions, reviews 3846.
 blight, *Xanthomonas campestris* pv.malvacearum, disease control, β -lactam
 antibiotics 6315.
 boll rot, *Colletotrichum capsici*, histopathology 5453.
 cotton leaf curling disease, virus-like particles etiology, epidemics, USA,
 Arizona 8814.
 crop residues, silage+weedy, *Lactobacillus plantarum* inoculation 2743.
Fusarium oxysporum f.sp.vasinfestum isolation, races geographical distribution,
 USA 1153.
 host-parasite interactions, *Phymatotrichum omnivorum*, observation methods,
 equipment 2926.
 oils, seeds, aflatoxins 1932.
 oilseed crops, dust, gram-negative bacteria endotoxins levels 5384.
 plant breeding, disease resistance, blight, *Xanthomonas campestris* pv.malvacearum
 2602.
 plant diseases, herbicides effects on, *Rhizoctonia solani*, *Fusarium oxysporum*
 f.sp.vasinfestum 7963.
 rhizosphere, *Pythium ultimum* spore germination 1148.
 root rot, disease control, ammonia, *Phymatotrichum omnivorum* 5523.
 root rot, *Phymatotrichum* 6280.
 root rot, *Phymatotrichum omnivorum*, disease control, soil temperature+water
 potential 8029.
 root rot, *Rhizoctonia solani*, disease control, 1-methylpyrazole carboxanilides,
 structure-activity relationships, *Gossypium hirsutum* 5531.
 roots exudates, terpenoids, wilt, *Fusarium oxysporum* f.sp.vasinfestum 8883.
 seeds meals, food contamination, aflatoxins, detoxification methodology 7081.
Verticillium dahliae pathogenicity, soil-borne diseases association crop rotation
 1149.

Gossypium hirsutum, (continued)

Verticillium wilt, cellulose conversion, glucose production, cellulase 3683.
Gostatin,
 isolation, characterization, aspartate aminotransferase inhibition, *Streptomyces*
sumatrensis 1724.
Gracilaria tikvahiae,
 biomass, methanogenesis, nitrogen recycling, bioreactors 8272.
 biomass, methanogenic bacteria, digestion (anaerobic), methanogenesis production
 2183.
 biomass production, nitrogen sources effects on digestion (anaerobic),
 methanogenesis 6396.
Grain,
 aflatoxins, analysis, thin-layer chromatography, high-pressure liquid
 chromatography, fatty acids fluorescence, *Zea mays* 8726.
 cereals, mycotoxins food contamination, methodology 225.
 cereals, quality, association mycotoxins food contamination 226.
 comparison, *Zea mays*, aflatoxins production, food contamination, factors
 affecting, reviews 7052.
 contamination, aflatoxin B1, *Oryza sativa* 8733.
 contamination, lactic acid bacteria multiplication, ultrastructure, electron
 microscopy 2742.
 detection *Fusarium* toxins, Egypt 7069.
 dust, endotoxins levels, gram-negative bacteria 7109.
 dusts, aflatoxins determination, thin-layer chromatography 3704.
 ergot alkaloids detection, use, liquid chromatography 7050.
 food contamination, aflatoxins, chemical analyses, extraction, thin-layer
 chromatography 7108.
Hordeum vulgare, food contamination, trichothecenes, gas chromatography 7107.
Hordeum vulgare, storage, *Penicillium* isolation, identification 7197.
 incidence, *Aspergillus glaucus*, storage conditions, USA 8056.
 infection, fungi, *Sorghum* 7150.
 use, ethanol fermentation, vapors phase separation techniques 1875.
Gram stain,
 blood culture, diagnosis, septicemia 3342.
 comparison, counter immunoelectrophoresis, agglutination, diagnosis, meningitis,
 Haemophilus influenzae type B, *Streptococcus pneumoniae*, man 3275.
 heat, comparison, methanol, fixation, methodology 5078.
 preparation, centrifuges use 1618.
 staining, bacteria, blood culture 703.
Gram-negative bacilli,
 antibacterial activity, aztreonam: β -lactam antibiotics, \pm amikacin
 3156.
 antibacterial activity, aztreonam, antibiotic synergism 6504.
 antibacterial activity, mezlocillin, piperacillin, azlocillin 7431.
 antibacterial activity, penicillins, cephalosporins 3086.
 antibiotic sensitivity testing, antibiotic resistance, clinical isolates, eye
 infection, man 5757.
 antibiotic sensitivity testing, automated methods 486.
 cefamandole, antibiotic resistance, disc-diffusion test 8292.
 clinical isolates, antibacterial activity, aminoglycoside antibiotics 7444.
 clinical isolates, antibacterial activity, dibekacin 6541.
 clinical isolates, antibiotic resistance, relationship urease, phosphatase,
 production 4709.
 1,2-dichloroethane biodegradation 1020.
 heavy metals resistance 9042.
 identification, biochemical characteristics, AutoMicrobic test 706.
 identification, indole test, reagents 707.
 recovery, blood culture 584.
 recovery, media (selective) methodology, feces, man 3302.
Gram-negative bacteria,
 antibacterial activity, β -lactam antibiotics+ β -lactamase inhibitors 6505.
 antibacterial activity, acrylic acid derivatives, structure-activity
 relationships, disinfectants 7551.
 antibacterial activity, ampicillin esters 2266.
 antibacterial activity, antibiotic FR-900109 1435.
 antibacterial activity, antibiotic K-4619 7479.
 antibacterial activity, antibiotic X-14885A 1442.
 antibacterial activity, chlorhexidine digluconate+EDTA+tris, association
 gentourinary tract infection, man 6456.
 antibacterial activity, ciprofloxacin 6467.
 antibacterial activity, ciprofloxacin 9099.
 antibacterial activity, extracts, *Allium sativum*, *Allium cepa* 7370.
 antibacterial activity, karabemycin 1437.
 antibacterial activity, licocholic acid derivatives 8337.
 antibacterial activity, monobactams, synthesis 6583.
 antibacterial activity, N-oxy-3-amino-2-azetidinone 9206.
 antibacterial activity, p-fluorobenzensulfonamide derivatives 7394.
 antibacterial activity, pyridine-2-azo- β -dimethylamino cephalosporin,
 β -lactamase indicators 501.
 antibacterial activity, safrin 1446.
 antibacterial activity, scandium(III) iron(III) enterobacter complex 5727.
 antibacterial activity, sesquiterpenes, structure-activity relationships, plant
 extracts 6446.
 antibacterial agents sensitivity 7359.
 antibiotic resistance, clinical isolates 6405.
 antibiotic sensitivity testing, ticarcillin: clavulanic acid 4786.
 antibiotics decontamination, shoots culture, trees 5782.
 antimicrobial activity, dyes, dental plaque isolates, dentistry 7553.
 aquatic bacteria, live, detection, fluorescein diacetate, fluorescent probes,
 fresh water 7534.
 Aspidosperma excelsum alkaloids antibacterial activity 5730.
 bactericidal activity, temperature, pH effects on, albumen, eggs, chickens 4010.
 ceftazidime: netilmicin, antibacterial activity 7428.
 cellulose decomposition, soil 6339.
 cephotent antibacterial activity 6508.
 clinical isolates, β -lactamase detection, assays 6884.
 clinical isolates, animal isolates, drug resistance, reviews 9058.
 clinical isolates, antibacterial activity, amoxicillin+clavulanic acid 7438.
 clinical isolates, antibiotic HR 810, antibacterial activity 7429.
 clinical isolates, antibiotic sensitivity testing, AutoMicrobic test,
 methodology, comparison 7419.
 colonial characteristics, wilt, pathogenicity, *Catharanthus roseus*, *Vitis*
vinifera 280.
 contamination, *Gossypium*, climatic conditions effects on disease control 4532.
 coumestrol, antibiotic sensitivity testing, antibiotic synergism, hydroxy
 quinolones 6557.

Gram-negative bacteria, (continued)

- differentiation methodology, gram-positive bacteria 1619.
 dilution tests, antibiotic sensitivity testing, methodology, comparison 7621.
 drug resistance, gene transfer, R factor RK2 6428.
 endotoxins, antibodies, enzyme-linked immunosorbent assay detection, blood 1939.
 endotoxins, humifiers, allergic alveolitis, man 1943.
 endotoxins, levels, dust, oilseed crops, *Gossypium hirsutum* 5384.
 endotoxins levels, grain dust 7109.
 ethanol, bactericidal activity, characterization 6452.
 fermentation characterization 2685.
 hybrids, antigenic determinants, vaccines production 6644.
 hypochlorous acid, chlorine dioxide, antibacterial activity, models, in vitro 8721.
 identification, aminopeptidase assays 7576.
 isolation, food, Mexico, drug resistance 437.
 isolation, heart surgery postoperative infection, antibiotic sensitivity testing, aminoglycoside antibiotics 3101.
 β -lactamase, antibiotic resistance, β -lactam antibiotics, reviews 3036.
 β -lactamase, clindamycin effects on depression 515.
 β -lactamase, inhibitors, clavulanic acid, sulbactam, quinacillin sulfone, antibiotic MM13902, antibiotic MM4550 9161.
 media (culture) methodology, urine isolates, man 1598.
 mezlocillin: β -lactam antibiotics, antibiotic antagonism, antibiotic synergism, antibacterial activity, bactericidal activity 7412.
 norfloxacin drug sensitivity testing 9095.
 olivanic acids, analogs, antibacterial activity 1335.
 piperacillin antibacterial activity 6526.
 polymyxin B, antibiotic sensitivity testing, characterization 6548.
 polysaccharides proteins conjugate, vaccines, preparation, immunogenicity 2323.
 psychrophilic bacteria, isolation, cold storage, seafood, *Melanogrammus aeglefinus* 8703.
 single-cell protein production, Agave fourcroydes crop residues 3415.
 susceptibility, complement, antibiotics, stimulation, polymyxins derivatives binding outer membranes 4803.
 use, antibiotic sensitivity testing, growth, synthetic media 9155.
- Gram-negative cocci,**
 antibiotic resistance, antibacterial activity, tyrothricin, gramicidin 7477.
- Gram-positive bacteria,**
 antibacterial activity, acrylic acid derivatives, structure-activity relationships, disinfectants 7551.
 antibacterial activity, antibiotic K-4619 7479.
 antibacterial activity, avamycin 1441.
 antibacterial activity, ciprofloxacin 6467.
 antibacterial activity, ciprofloxacin 9099.
 antibacterial activity, extracts, *Allium sativum*, *Allium cepa* 7370.
 antibacterial activity, karbarmycin 1437.
 antibacterial activity, itocholic acid derivatives 8337.
 antibacterial activity, monobactams, synthesis 6583.
 antibacterial activity, p-fluorobenzensulfonamide derivatives 7394.
 antibacterial activity, safracin 1446.
 antibacterial activity, sesquiterpenes, structure-activity relationships, plant extracts 6446.
 antibacterial activity, *S. reptomyces variegatus* sp. nov.
 α -hydroxyketopentanes antibiotics 2309.
 antimicrobial activity, dyes, dental plaque isolates, dentistry 7553.
 antimicrobial activity, urethanes derivatives 1436.
 bactericidal activity, temperature, pH effects on, albumen, eggs, chickens 4010.
 clinical isolates, β -lactamase detection, assays 6884.
 clinical isolates, antibacterial activity, amoxicillin-clavulanic acid 7438.
 coumestrym, antibiotic sensitivity testing, antibiotic synergism, hydroxy quinolones 6557.
 detection, soil, use, teichoic acid, bioassays 8202.
 differentiation methodology, gram-negative bacteria 1619.
 EDTA-tromethamine- α -antimicrobial agents antibacterial activity 4616.
 hypochlorous acid, chlorine dioxide, antibacterial activity, models, in vitro 8721.
 identification, aminopeptidase assays 7576.
 identification methodology 2461.
 intestinal microflora, animal isolates, antibiotic sensitivity testing, feeds additives 3729.
 mezlocillin, β -lactam antibiotics, antibiotic antagonism, antibiotic synergism, antibacterial activity, bactericidal activity 7412.
 norfloxacin drug sensitivity testing 9095.
 olivanic acids, analogs, antibacterial activity 1335.
 piperacillin antibacterial activity 6526.
- Gram-positive cocci,**
 achromopeptidase, cytotoxicity, methodology 1578.
 antibiotic sensitivity testing, antibiotic resistance, clinical isolates, eye infection, man 5757.
 bactericidal activity, mikamycin 3151.
- Gramicidin,**
 antibacterial activity, antibiotic resistance 7477.
 cross-linkage, polymyxin B, antibacterial activity 4055.
- Gramicidin A,**
 N.M.R. 4057.
 peptide synthesis, C.D., N.M.R. 3141.
- Gramicidin D,**
 proteinase activity, effects on, *Bacillus thuringiensis* 1412.
 proteinase activity, effects on, *Bacillus thuringiensis* 6025.
- Gramicidin S,**
 analogs, peptide synthesis, structure-activity relationships, antibacterial activity 3142.
 ATP, ADP affinity, *Bacillus brevis* 1409.
 biosynthesis, phenylalanine, role, *Bacillus brevis* 8381.
 cytotoxicity, *Bacillus subtilis* protoplasts 7467.
 toxicity, comparison *Bacillus thuringiensis* toxins, larvae, *Aedes aegypti* 2661.
 water chemistry, acidity, solubility 6577.
- Gramicidin S synthetase,**
 multienzyme complexes, inactivation control, antibiotics production, *Bacillus brevis* 1375.
- Gramineae,**
 Azospirillum rhizosphere, Mexico, subtropical zones 4634.
 barley yellow dwarf virus infection, Aphididae interaction 1989.
 barley yellow dwarf virus infection, corn hosts intermediates 1996.
 control, fungi, biodegradation, books, conferences 1697.
 enzyme-linked immunosorbent assay, detection, barley yellow dwarf virus 8802.

Gramineae, (continued)

- eye spot, *Pseudocercospora herpotrichoides* spores dispersal, inhibition, cellulose xanthate 8058.
 eye spot, soil microorganisms, antagonism, *Rhizoctonia*, *Ceratobasidium* 7208.
 Fusarium scab, pathology, zearalenone production, animals ingestion, toxicity, reviews 7056.
 luteovirus, antigenic characteristics, identification, China, People's Rep. 8796.
 molds, plant diseases, phytopathology control, reviews 5430.
 plant diseases, phytopathogenic fungi, books 1688.
 rhabdovirus transmission, *Ribautodolaphax notabilis* role, Iran 262.
 rhizoplane microorganisms, bacteria, association, phosphorus, nitrogen, effects on 6334.
 rhizosphere, nitrogen-fixing bacteria isolates, nitrogenase activity 9014.
 root rot fungi, biodegradation, filter paper 1001.
 roots, incidence, *Gaeumannomyces graminis*, *Phialophora radiciicola* 2786.
 rust, redinodiosis, Puccinia, Puccinia graminis, epidemiology 5417.
 susceptibility, Fusarium culmorum, disease control, fungicides 2895.
 tropical environment, lignocelluloses, fermentation, silage, feeds production 5358.
 virus-like particles infection, Australia 1988.
 wilt, *Xanthomonas campestris* pv. *graminis*, incidence, British Isles 4521.
 yield, inoculation, *Azospirillum*, nitrogen fixation, rhizosphere colonization 2968.
- Granada medium,**
 media (selective), *Streptococcus* group B 3320.
- Granules,**
 controlled-release, ofurace, use, disease control, *Solanum tuberosum* late blight, *Phytophthora infestans* 2887.
- Granulosa virus,**
 biological control, *Agrostis segetum*, Pakistan 6079.
 biological control, effects on nontarget organisms, orchards, *Cydia pomonella* 4387.
 biological control, pest control, field trials, *Cydia pomonella* 4388.
Cydia pomonella, isolates, use, pest control, *Rhyacionia frutana* 6892.
 isolation, virulence, use biological control, *Cadra figulella* 6904.
 virulence, biological control, susceptibility, larvae, *Heliothis zea*, *Heliothis virescens*, *Heliothis armigera* 6903.
- Grapefruit,**
 post-harvest decay, *Penicillium digitatum*, phenylalanine ammonia-lyase activity repression 2048.
- Grape,**
 juices, yeasts growth measurement, nephelometry photometry 7851.
 post-harvest decay, effects on wine fermentation 6939.
 post-harvest decay, prevention, carbon monoxide, storage conditions 8057.
- Grapevine Bulgarian latent virus,**
 antigenic variants, characterization, plant diseases 5451.
- Grapevine fanleaf virus,**
 detection, enzyme-linked immunosorbent assay methodology, *Xiphinema index* vect 3255.
- Grapevine leaf roll virus,**
 leaf-roll, effects on yield, *Vitis vinifera* clones 8859.
 plant diseases, *Vitis vinifera*, growth, yield 4536.
- Grapevine mottle virus,**
 pathogenesis comparison, grapevine vein mosaic virus, *Vitis vinifera* symptoms 3816.
- Grapevine vein mosaic virus,**
 pathogenesis comparison, grapevine mottle virus, *Vitis vinifera* symptoms 3816.
- Grapevine virus A,**
 plant diseases, *Vitis vinifera*, disease transmission, vectors, *Pseudococcus longispinus* 3844.
- Graphium penicillioide,**
 identification, immunodiffusion 806.
- Grasslands,**
 arbuscular environments, phosphorus uptake, vesicular-arbuscular mycorrhizas 12.
 nitrogen cycle, soil microorganisms, seasonal variations 5667.
 soil characteristics, soil microorganisms, respiration 395.
 soil microorganisms, *Fusarium* 3950.
 soil properties, clays α -amylase, β -D-fructofuranosidase, activity 403.
- Grassy stunt virus,**
 disease transmission, *Nilaparvata lugens*, *Nilaparvata bakeri*, *Oryza sativa* 4520.
- Gravel pits,**
 land reclamation, vesicular-arbuscular mycorrhizas restoration, soil storage 1253.
- Grazing,**
Onychiurus latus, effects on competition, *Mycena galopus*, *Marasmius androsaceus* decomposition, leaf litter, *Picea sitchensis* 8940.
Onychiurus latus, effects on soil vertical distribution, *Mycena galopus*, *Marasmius androsaceus*, forests, *Picea sitchensis* 8939.
- Greece,**
 climatic conditions, cold, adaptations, soil microorganisms, nitrification, soil 6358.
 Lycopersicon esculentum, stem canker, *Alternaria alternata* f.sp. *lycopersici*, greenhouses 8013.
- Green mold,**
Penicillium digitatum, post-harvest decay, cross-resistance, guazatine, benomyl 2200.
 post-harvest decay, oranges, disease control, fungicides 5470.
- Greenhouses,**
 ectomycorrhizas inoculation, stimulation, growth, nutrient uptake, seedlings, *Pinus* 5567.
 Elaeusine coracana screening, fungi vesicular-arbuscular mycorrhizas inoculation 2145.
 Eucalyptus, incidence, fungi plant disease 8942.
 Lycopersicon esculentum, stem canker, *Alternaria alternata* f.sp. *lycopersici*, Greece 8013.
 Medicago sativa seedlings fungi diseases, USA, California 1115.
Solanum tuberosum, potato virus S transmission, cutting instruments 8008.
- Greenland,**
 Pezizales, ecological distribution, habitat, soil 2128.
- Gremmeniella abietina,**
 canker, *Pinus sylvestris*, association nutrient dynamics 5601.
 dieback, *Pinus sylvestris*, association nutrient dynamics 5601.
- Grewia asiatica,**
 Phoma sorghina leafspot incidence, India 2034.

- ey mold,**
Phaseolus vulgaris, Botrytis cinerea, pathogenesis association developmental stages, environmental effects 1114.
- trifluorodosea,**
fruit bodies, glucans, antitumor activity, sarcoma 180, isolation, mice 6891.
β-D-glucan, carbohydrate composition, structure, antitumor antibiotics 5208.
β-D-glucan structure 6057.
- riacofulvin,**
antibiotics, antifungal activity, relative inhibition factors measurements, dose-response effects 4017.
drug sensitivity testing, Candida 5735.
production, industrial applications, Penicillium petulum 9171.
susceptibility methodology, dermatophyte fungi 1336.
susceptibility tests, Trichophyton rubrum, factor affecting 516.
- riacrodin,**
antibiotics production, Actinomadura recticatena sp. nov. 4060.
- round water,**
bacteria, community structure, biomass, nutritional status, indigenous species 5817.
bacteria films, organic compounds pollution biodegradation 8690.
enterovirus levels, disease transmission, reviews 2385.
indigenous species, bacteria, actinomycetes, yeasts, vertical distribution 5816.
microbial pollution, irrigation, waste water irrigation 5852.
pollutants, biodegradation, bacteria 5814.
viruses, survival, adsorption, temperature effects on, microbial pollution 5858.
waste water infiltration, pollutants biodegradation, nutritional status, indigenous species, bacteria 5813.
water treatment, carbon (activated) adsorption, +biodegradation 7499.
- roundout rossette virus,**
plant diseases, Arachis hypogaea, detection 4504.
- rowth conditions,**
Candida utilis 801.
Fusarium, dry rot, Solanum tuberosum 2030.
- rowth curves,**
mathematical models, chemostats, microorganisms 9269.
- rowth factors,**
biotin, nutrient requirements, cell culture, reviews, yeasts 7787.
mycobactin, purification, Mycobacterium paratuberculosis 4394.
peat hydrolysates, single-cell protein production, Candida utilis 6809.
rowth inhibition test,
detection, Mycoplasma mixed infection, animal isolates 2449.
- rowth pattern,**
Phanerochaete chrysosporium, lignin biodegradation 179.
- rowth regulators,**
fucose additives, antibiotic sensitivity testing, gram-positive bacteria, intestinal microflora, animal isolates 3729.
plants, production, Fusarium 3944.
Streptomyces, L-alanosine, production, inhibition, molting, larvae, Leucania separata 7774.
- rowth rings,**
Picea abies, relationship Armillaria mellea, infection 355.
- rowth gasar,**
filter feeders, accumulation, bacteria, indicator species, public health 3217.
- uanine,**
analogs, synthesis, antiviral activity 6479.
- uanosine diphosphate-L-fucose,**
production, use enzymes, Agrobacterium radiobacter, Klebsiella pneumoniae 6061.
- ross-resistance,**
Penicillium digitatum, green mold, post-harvest decay 2200.
disease control, Mucor, postharvest decay, tomatoes 5472.
- ulbournia conjugata,**
nodulation, Rhizobium 4667.
- ulnacillin,**
β-lactamase substrates, antibodies deactivation, Staphylococcus aureus 5156.
- ulnea grass mosaic virus,**
plant diseases, Penicillium americanum, etiology, Ivory Coast 4512.
- ulzotte abyssinica,**
daylength, effects on infection, Glomus macrocarpum 8977.
soil aeration, carbon dioxide effects on symbiosis, Glomus macrocarpum 3937.
vesicular-arbuscular mycorrhizas, nutrient uptake, soil aeration effects on 1256.
- um,**
gelation, GELRITE, use, media (culture), thermophilic microorganisms 3335.
- ums,**
analysis, agar substitutes 774.
polysaccharides, extracellular polymers, carbohydrate composition, Pseudomonas clostrae 4366.
polysaccharides structure, Rhizobium 4368.
- umosus reasil,**
tomatidine biodegradation 7839.
- ymnostoma,**
actinomycetes, nitrogen fixation, tropical environment, reviews 2914.
- ymus curvilinea,**
citrus exocortis viroid infected, RNA, DNA, separation techniques, use, ethanol 3248.
- ypophylla paniculata,**
stunt, mycoplasma-like organisms 3847.
- abekacin,**
antibacterial activity, inhibition protein biosynthesis, outer membranes damage, Escherichia coli 521.
- abitar,**
disease, association, vesicular-arbuscular mycorrhizas symbiosis weeds, USA, Utah 396.
- Pozizales,**
soil, Greenland 2128.
- abranthus,**
disease resistance, infection, Sclerotium cepivorum 8043.
- rematobia irritans,**
biological control, Bacillus thuringiensis subsp. israelensis, larvicides 5209.
- eromphillus,**
antibiotic resistance, antibacterial activity, lythochin, gramicidin 7477.
bactericidal activity, mikamycin 3151.
carbohydrates fermentation detection, methodology comparison 3281.
- Haemophilus, (continued)**
clinical isolates, moxalactam, antibacterial activity 5768.
differentiation, Neisseria, micromethods, biochemical analysis 3290.
identification, biotyping, methodology 770.
isolation, dilution methodology, lung, pigs, slaughter 2463.
meningitis, immunodiagnosis, counter immunoelectrophoresis, agglutination 2488.
- Haemophilus ducreyi,**
antibiotic resistance, tetracycline, plasmids, DNA, restriction endonuclease mapping 3027.
clinical isolates, media (isolation), methodology 711.
isolation, identification, methodology 793.
media (isolation), growth, methodology 6780.
- Haemophilus equigenitalis,**
contagious equine metritis, media (isolation), methodology 3307.
isolation, incubation time, contagious equine metritis, horses 7573.
- Haemophilus influenzae,**
ampicillin antibiotic resistance, clinical isolates, disseminated infection, children 441.
ampicillin, antibiotic resistance, penicillin-binding protein, membrane permeability 7338.
antibacterial activity, cefotaxime, moxalactam, temocillin 5754.
antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 6465.
antibacterial activity, fludalanine + pentizidone 6454.
antibacterial activity, temocillin 3105.
antibiotic FCE 22101 antibacterial activity 1431.
antibiotic MDL 19,592, antibacterial activity 1389.
antibiotic RU 28965, antibacterial activity 4878.
antibiotic sensitivity testing 2250.
antibiotic sensitivity testing, ampicillin, cefamandole, chloramphenicol, MS-2 system 498.
antibiotics, reviews 6408.
antibodies, detection, enzyme-linked immunosorbent assay, comparison, radioimmunoassay 2515.
antigens isolation, vaccines production, immunogenicity, cattle 4895.
antigens, lung, agglutination detection, pigs 2520.
biotyping methodology 737.
biotyping methodology 779.
blood culture growth, hemin, NAD, effects on 791.
cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1388.
ceftriaxone antibacterial activity, agar diffusion test 1392.
clinical isolates, ampicillin, antibiotic resistance 9077.
clinical isolates, antibiotic sensitivity testing, antibiotic resistance, ampicillin, chloramphenicol, incidence, Spain 6420.
clinical isolates, antibiotic sensitivity testing, capsules 4812.
clinical isolates, drug resistance 3035.
detection, BACTEC test, media (culture), hypertonicity 698.
detection methodology, β-lactamase production relationship 3286.
detection methodology, enzyme-linked immunosorbent assay comparison, man 2465.
identification methodology 2487.
β-lactamase, detection methodology, cerebrospinal fluid, man 1643.
latex agglutination, detection, antigens, body fluids, man 3310.
meningitis, diagnosis, cerebrospinal fluid Phadebact test, man 3321.
meningitis, epidemiology, ampicillin, antibiotic resistance, man 7314.
outer membranes, membrane proteins purification 3412.
photosensitivity, U.V. radiation, anaerobic conditions, nitrogen 4749.
pili, detection, hemadsorption methodology 2470.
poly(nobosephosphate), measuring techniques, enzyme immunoassay substrates 724.
polysaccharides, + Corynebacterium diphtheriae toxoids, combined vaccines, immunogenicity, rabbits 6655.
serotyping, agglutination, Phadebact test 5066.
- polyribose phosphate antigens detection, agglutination tests, body fluids, man 1584.
- Haemophilus influenzae type b,**
antibacterial activity, antibiotic synergism, rifampicin ampicillin, + chloramphenicol 9166.
antigens detection, methodology comparison, body fluids, man 4189.
antigens, latex agglutination, comparison, phadebact test, detection, cerebrospinal fluid 795.
capsules, polysaccharides detection, methodology comparison 3303.
clinical isolates, antibiotic resistance, β-lactam antibiotics, characterization 6407.
meningitis, diagnosis, counter immunoelectrophoresis, agglutination, Gram stain, comparison, man 3275.
- Haemophilus parainfluenzae,**
antibacterial activity, cefotaxime, moxalactam, temocillin 5754.
biotyping methodology 737.
clinical isolates, drug resistance 3035.
transposon 10, association, tetracycline, antibiotic resistance, homology, Escherichia coli 9073.
- Haemophilus paraphrophilus,**
β-lactamase detection, quality control, clinical microbiology 4688.
- Haemophilus pleuropneumoniae,**
animal isolates, agglutination, use, identification, serotyping 2516.
animal isolates, pigs, drug resistance levels 6406.
antibacterial agents antibacterial activity 6461.
infection, pigs, immunodiagnosis, 2-mercaptoethanol agglutination 7593.
media (selective) 739.
- Haflia alive,**
antibiotic resistance, chlorination effects on, sewage isolates 6437.
cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1388.
- Hair,**
microflora, bacteria contamination, swimming pools 2405.
- Halo blight,**
Pseudomonas phaseolicola, disease resistance genes, plant breeding, Phaseolus vulgaris 5481.
Pseudomonas syringae pv. phaseolicola, disease resistance, Phaseolus vulgaris 5406.
- 2-Haloacid dehalogenase,**
lactic acid enantiomers production 8517.
- Haloarcula,**
antibiotic sensitivity testing 6497.
- Haloaromatics,**
substrates, industrial wastes, biodegradation 3207.

- Halobacteriaceae**, antibiotic sensitivity testing 6497.
- Halobacterium**, antibiotic sensitivity testing 6497.
- Halobacterium halobium**, purple membranes, bacteriorhodopsin pigments, C.D. 4257.
- Halococcus**, antibiotic sensitivity testing 6497.
- Halogenation**, microorganisms 7653.
- Halogens**, +aromatic compounds, microorganisms biodegradation, mechanisms, reviews 7826.
- Haloperoxidase**, substrate specificity, alkenes, fungi 5187.
- Ham**, food processing, spoilage, starter cultures 3709. *Lactobacillus viridescens* association, temperature tolerance 7027. microorganisms, spoilage, tumbling effects on 7857.
- Hamycin**, fungi, fermentation, high-pressure liquid chromatography, antifungal activity 5900.
- Hand**, disinfection, prophylaxis, viruses food-borne diseases, man 9266. isolates, sensitivity, comparison, cefamandole 6524.
- Hansenula anomala**, antifungal activity, essential oils, spices 8318. cytochrome c-cytochrome b2 complex, binding characterization, fluorescence 861.
- Hansenula mrakii**, toxins, purification, characterization 7114.
- Hansenula polymorpha**, alcohol oxidase, preparation, alcohols colorimetry applications 3446. growth, single-cell protein production 358. immobilized cells, methanol, oxidation, kinetics 997. methanol fermentation, single-cell protein production, monitoring, computer applications 5966. methanol oxidation enzymes biosynthesis 929. peroxidases, enzymes biosynthesis 4276. single-cell protein production, optimization cost-benefit analysis, fermentation, mathematical models 5963.
- Haploidy**, determination methodology, *Saccharomyces* 9333. *Saccharomyces cerevisiae* hybrids development, ethanol fermentation strains 6146.
- Herdwoda**, hydrolysis, glucose production 5160.
- Harpasporium anguillulae**, parasites, *Rhabditis*, *Aphelenchus* 2126.
- Harvesting**, ascocarps, *Tuber melanosporum* 3834. cultivation techniques, effects on water content 8701. dates, effects on *Phomopsis* infection, seeds, seed-borne diseases, *Glycine* max 8778. effects on, *Botrytis allii*, neck rot, post-harvest decay, onions 8055. machinery, association, aerosols, particulate pollution, microorganisms, measuring techniques, mathematical models 3229. *Pseudotsuga menziesii*, leaves dehydration, retention, needlecast *Phaeocryptopus gaeumannii* effects on 3911.
- Hatcheries**, sanitation, microorganisms monitoring 2330.
- Haustoria**, chemicals induction, *Uredinales* 6221. *Phytophthora* infections, disease resistance, callose growth, tubers, *Solanum tuberosum* 2008. *Uromyces phaseoli*, inhibition, triphenylphosphite, rust, *Phaseolus vulgaris* 2899.
- Hawell**, *Acacia* rust, fungi endogenous species 7236.
- Hay**, preservation, organic compounds, antimicrobial activity, microorganisms, effects on 6490. *Trifolium pratense*, contamination, *Rhizoctonia leguminicola*, swainsonine, mycotoxins, horses 8728.
- Hazardous wastes**, waste treatment, microorganisms use, books 1694.
- Hazimicins**, antifungal activity, antibacterial activity, *Micromonospora echinospora* subsp. *challensis* 2294.
- Heart**, surgery, postoperative infection, gram-negative bacteria isolation, antibiotic sensitivity testing, aminoglycoside antibiotics 3107.
- Heat**, activation *Bacillus* spore germination, enumeration, milk agar, media (isolation) 1911. +ammonia, decontamination, aflatoxin B1, corn 7889. comparison, methanol, fixation, Gram stain, methodology 5076. *Escherichia coli* injuries, antibiotics sensitivity, cell surface hydrophobicity 2241. +hydrogen peroxide, disinfection, septic tanks effluents 9243. penetration, microorganisms survival, baking, bread 6986. production, adiabatic fermentation, measuring techniques, water baths 5271. production, association, soil microorganisms biodegradation carbon sources 2150. production, composts, *Basidiomycetes* 4463. production, *Vibrio alginolyticus*, calorimetry methodology 3278. sterilization 1360. sterilization, spores, microorganisms 1368.
- Heat inactivation**, α -amylase, *Bacillus* *stearothermophilus*, *Xanthomonas campestris*, ultrahigh temperature sterilization, dairy products 6974. triacylglycerol lipase, *Pseudomonas fluorescens* 5146.
- Heat resistance**, *Bacillus*, antibacterial activity, sodium citrate 7374. bacteria spores, mechanisms, food industry 6415. bioassays, *Bacillus stearothermophilus* spores 6493. *Clostridium* spore, heat shock 7341. sodium citrate antibacterial activity, *Bacillus stearothermophilus*, canned food 7376.
- Heat resistance (continued)**, spores, bacteria, food industry 7030.
- Heat shock**, association, plants, essential oils, effects on, yeasts 3064. *Clostridium sporogenes*, heat resistance 7341. proteins, biosynthesis, relationship ethanol tolerance, *Saccharomyces cerevisiae* 955.
- Heat tolerance**, selection, breeding, *Agaricus brunneus* 7868.
- Heat transfer**, steam, sterilizers, canning 7036.
- Heat treatment**, +ultrasound, synergism, sterilization, *Streptococcus faecium* 4034.
- Heat treatments**, association *Escherichia coli* lipopolysaccharides, *Limulus* lysate test, pyrogens tests 227. breast milk, microorganisms contamination, nutritional status, immune status, infants, man 7038. comparison, formalin, *Legionella pneumophila*, antigens, use, indirect fluorescent antibody test 792. control, *Cladosporium resinae*, *Penicillium corylophilum*, contamination, biodegradation, fuels 1296. decontamination, potato virus S, potato virus S, cultivars, *Solanum tuberosum* 8881. disease control, *Erwinia carotovora* blackleg, *Solanum tuberosum* tubers 1195. *Escherichia coli*, p-hydroxybenzoic acid antibacterial activity 1332. *Escherichia coli*, p-hydroxybenzoic acid esters antibacterial activity, magnesium effects on 3055. isolation methodology, *Legionella pneumophila* 3333. pasteurized milk quality, storage conditions 8711. seed treatments, disease control, cowpea banding mosaic virus, *Vigna unguiculata* 2095. solar radiation, water purification, contamination, pasteurization, water, methodology 3225.
- Heating**, milk, refrigeration, coryneforms identification 6998.
- Heavy metals**, alkaline carboxypeptidase, zinc containing, active sites inhibition, *Streptomyces albus* 5985. *Allium cepa*, soil pollution vesicular-arbuscular mycorrhizas, *Glomus mosseae* 38. antimicrobial activity 1358. binding, *Klebsiella aerogenes* capsular polymers, activated sludge 6679. bioaccumulation, polysaccharides adsorption, *Zooglyphs ramigera* 3973. concentration, heterotrophic microorganisms slimes, rivers, Eira 6718. copper, nickel, pollution effects, community composition, soil microorganisms 2142. inhibition alcohol dehydrogenase, mechanisms, pH effects on, yeasts 7686. inhibition, ectomycorrhizas, roots colonization, *Picea sitchensis* 8168. inhibition, nitrifying bacteria, wastewater treatment 2353. *Medicago sativa* treatment, nitrogen fixation, leghemoglobin, nodulation, biomass 2961. microorganisms, removal, waste water 3202. pollution, bacteria biodegradation, resistance 3680. pollution effects, toxicity, soil microorganisms 5680. resistance, gram-negative bacilli 3042. resistance, relationship β -lactamase levels, clinical isolates, *Staphylococcus aureus* 2203. salts, anions, susceptibility, *Mycobacterium avium*, *Mycobacterium intracellulare*, *Mycobacterium scrofulaceum* 3043. salts, *Oryza sativa* seedlings, effects on disease resistance, brown spot, *Drechslera oryzae* 2077. soil amendment, toxicity, bacteria 4675. toxicity, *Fusarium solani*, resistance, association, sodium thiosulfate, sodium tetrahydroxide 2201.
- Helboma**, ectomycorrhizas, inoculation, plantations, *Quercus robur*, *Quercus petraea* 7220. ectomycorrhizas, mycelia, inoculation, seedlings, *Pinus banksiana* 7227.
- Helboma crustuliniforme**, biological control, antagonism, ectomycorrhizas soil-borne diseases, *Fagus* 5513. carbon-13 distribution, fatty acids, N.M.R. 8957. ectomycorrhizas, phosphate, nutrient uptake, stimulation, fertilizer applications, *Pseudotsuga menziesii* 5574.
- Helboma cylindrosporum**, +auxin, effects on roots formation, propagation, *Pinus pinaster* 5929. ectomycorrhizas, *Pinus pinaster*, chitin levels 3949. immobilized cells, inoculum efficacy, trees 8163.
- Helboma saccharioides**, seedlings inoculation, roots colonization, spatial distribution, soil, *Betula* 5556.
- Hel cells**, DNA-binding protein, X-ray crystallography, adenovirus (human) 5 2563. herpes simplex virus 1, herpes simplex virus 2, infected, S-(1,3-dihydroxy-2-propoxymethyl)guanine, effects on, macromolecules biosynthesis 9125. interferon antiviral activity, viruses infection 1350. tissue culture, purification, measles virus 5005. vesicular stomatitis virus, replication, nucleotides, antiviral activity 8334.
- Helianthus annuus**, blight, *Alternaria helianthi*, virulence 8003. charcoal rot, etiology, *Alternaria alternata*, *Fusarium roseum*, *Fusarium solani*, *Macrophoma phaseolina*, *Phoma macdonaldii*, *Rhizopus arrhizus* 4551. *Diaporthe helianthi* infection, stem canker, leafspot, USA, Texas 3839. *Macrophoma phaseoli* infection, pathogenesis, association developmental stage irrigation effects on 1142. plant diseases, *Sclerotium rolfsii*, biological control, *Trichoderma harzianum* 4586. rust, *Puccinia helianthi*, Australia 8014. *Sclerotinia sclerotiorum* pathogenesis, virulence, role pH, oxalic acid levels 2010. seeds, mycoflora, aflatoxins detection, Argentina 7061. seeds, survival, *Macrophoma phaseolina*, pathology 8026. stalk rot, *Erwinia carotovora*, susceptibility association age, USA, North Dakota 2820. stem canker, *Phomopsis* 7194. *Trachysphaera* 19-ic acid, *kaur-16-en-19-ic acid*, isolation, antibacterial activity, *Staphylococcus aureus*, *Mycobacterium smegmatis* 4009.

- anthus tuberosus**, fermentation, ethanol production, immobilized cells, *Kluyveromyces marxianus* 3640.
- plant diseases effects on yield, *Puccinia helianthi*, *Erysiphe cichoracearum*, *Sclerotium rolfsii* 5457.
- Pseudomonas syringae* pv. *tagetis* infection, chlorosis, leafspot 3849.
- alkals, inulin fermentation, ethanol production, *Kluyveromyces marxianus* 5298.
- ubers, fermentation, ethanol production, *Saccharomyces cerevisiae*, *Kluyveromyces fragilis* 5297.
- lichrysum**, ootomycorrhizas symbiosis, Australia 2132.
- lityochneus digonicus**, sarastirism, roots, interspecific relationships, mycorrhizas, *Pinus strobus*, *Pinus excelsa* 348.
- lithis armigera**, biological control, use resistant mutant, U.V. radiation, temperature, *Bacillus thuringiensis* 6746.
- cytoplasmic polyhedrosis virus isolates, structural proteins, purification, characterization 3422.
- egrated control, nuclear polyhedrosis virus, pesticides 977.
- arvae, mortality, nuclear polyhedrosis virus, bioassays, use biological control 967.
- arvae susceptibility, nuclear polyhedrosis virus, granulosis virus 6903.
- lithis subleza**, infection susceptibility, biological control, nuclear polyhedrosis virus 2657.
- lithis virescens**, integrated control, pesticides + *Bacillus thuringiensis*, nuclear polyhedrosis virus 135.
- arvae susceptibility, nuclear polyhedrosis virus, granulosis virus 6903.
- lithis zea**, biological control, mortality, dose-response effects, mathematical models, bioassays, nuclear polyhedrosis virus 6901.
- infection susceptibility, biological control, nuclear polyhedrosis virus 2657.
- arvae susceptibility, nuclear polyhedrosis virus, granulosis virus 6903.
- litropium**, development, vesicular-arbuscular mycorrhizas effects on 2811.
- lityerum**, ootomycorrhizas symbiosis, Australia 2132.
- lithinophorium teres**, net blotch, disease resistance, genetic variance, plant breeding, *Hordeum vulgare* 316.
- lithinophorium**, cellulolytic enzymes activity 6871.
- leafspot, incidence, cultivars mixed culture, *Hordeum vulgare* 2841.
- mancozeb + curzate antifungal activity 2085.
- toxin, *Zea mays* susceptibility, reviews 1123.
- lithinophorium carbonum**, disease resistance suppression, *Helminthosporium maydis* inoculation, *Zea mays* 1169.
- inoculation, *Sophora japonica* leaves, phytoalexins production 1131.
- leafspot, genotypes, *Zea mays*, effects on, fitness 7971.
- phytooxins, structure-activity relationships, *Zea mays* 1983.
- oxins, hydrogen bonding, N.M.R., I.R. spectroscopy 7911.
- lithinophorium indicum**, antimicrobial activity, nematocides 1325.
- lithinophorium maydis**, inoculation, *Helminthosporium carbonum* disease resistance suppression, *Zea mays* 1169.
- phytooxins, analogs, structure-activity relationships, *Zea mays* 1955.
- phytooxins, roots bioassays, susceptibility, genes, *Zea mays* 8754.
- toxin, mitochondria, calcium transport inhibition, *Zea mays* 7155.
- lithinophorium oryzae**, antifungal activity, dialyl methylphosphonates, structure-activity relationships 3955.
- rown spot, *Oryza sativa* seedlings, disease control, phytoalexins inducers 3887.
- disease resistance plant breeding, *Oryza sativa* 8896.
- streptomycetes acrymyn antifungal activity 4869.
- lithinophorium rostratum**, oilar diseases, seasonal variations, *Vitis vinifera* 8016.
- lithinophorium sativum**, antifungal activity, rhodanine derivatives 4018.
- antifungal activity, 1-aryl-2-nitro-propane-1,3-diols, 3-aryl-2-nitroprop-2-enyl esters, derivatives, synthesis 3061.
- oot rot, disease control, soil amendment, sawdust, oil cake, *Triticum aestivum* 8203.
- oot rot disease resistance, inheritance, *Triticum* 2885.
- net blotch, pathogenicity, host range, *Panicum virgatum* 2794.
- lithinophorium solani**, onidia production, media (culture), silver scurf, *Solanum tuberosum* 8491.
- lithinophorium tureicum**, light, *Zea mays*, Egypt, Arab Rep. 2792.
- lithinophorium victorise**, onidia spore germination, pure culture, comparison, soil fungistats 2928.
- phytooxins, host specificity, *Amara sativa* 7902.
- oxins, viciotoxins derivatives, isolation, N.M.R. 3733.
- mad sorption**, immunodiagnosis, syphilis 2500.
- methodology, detection, *Haemophilus influenzae* pili 2470.
- magglutination**, denovirus (human), erythrocytes, glutaraldehyde fixation 2440.
- inical microbiology, *Escherichia coli*, colonization factors antigens 701.
- comparison, fluorescent antibody test, diagnosis, syphilis, man 3317.
- ili proteins, *Escherichia coli*, subunit structure, purification, characterization 4252.
- se, *Mycobacterium*, proteins, purification 9290.
- magglutination inhibition**, antibodies detection, avian infectious bronchitis virus, chickens 3245.
- comparison enzyme-linked immunosorbent assay, detection, rubella virus, man 5016.
- etection, rubella virus antibodies 616.
- erpesvirus (equine) 1 detection, serum, horses 606.
- immunodiagnosis, influenza B virus, enzyme-linked immunosorbent assay comparison 605.
- fectious bronchitis virus serotyping 9280.
- influenza virus detection methodology comparison, hemolysis, man 4149.
- methodology comparison, latex agglutination, rubella virus antibodies detection
- Hemagglutination inhibition, (continued)** 1540.
- use, *Mycobacterium*, proteins, purification 9290.
- Hemagglutinin**, attenuation, antigenicity, vaccines production, reovirus 6627.
- biosynthesis, influenza B virus, ribavirin antiviral activity, cell culture 8322.
- biosynthesis, media (culture), *Bordetella pertussis* 9312.
- cloning, production, vaccines, influenza virus 6598.
- expression, cloning vectors, immunogenicity, antigenicity, vaccines production, influenza virus 6636.
- genes, influenza virus, vaccinia virus transfection, gene expression induction antibody response, hamsters, rabbits 4887.
- influenza A virus, isolation, density gradients centrifugation, bromelain cleavage 4994.
- influenza virus, immunodiffusion standardization 4993.
- influenza virus, stimulation natural killer cells cytotoxicity, use vaccines production 6647.
- measles virus, Immunoglobulin G detection, enzyme immunoassay methodology 8442.
- purification, affinity chromatography, influenza virus 8435.
- purification, characterization, *Clostridium botulinum* 2557.
- purification, vaccines production, immunogenicity, *Bordetella pertussis* 8389.
- vaccines production, *Bordetella pertussis* 3176.
- Heme**, binding cytochrome P-450, characterization cysteine residues, *Pseudomonas putida* 910.
- Hemelia vastatrix**, leaf rust, *Coffea*, disease control, cuprous oxide, cupric hydroxide 8123.
- Hemicellulase**, immobilized enzymes, *Macrophomina phaseolina* 8571.
- production, *Cellulomonas flavigena* 8545.
- production, *Trichoderma reesei* + *Aspergillus wentii* mixed culture, media (culture) association 1736.
- Trichoderma reesei*, hydrolysis, lignocelluloses 7833.
- Hemicellulose**, conversion, ethanol production, *Pachysolen tannophilus* 3620.
- degradation, staining detection, cellulytic bacteria 1634.
- fermentation, cellulase activity, *Trichoderma* 3622.
- hemicellulase hydrolysis, p-chloromercuribenzoic acid, sulfhydryl groups, inhibitors effects on, *Cephalosporium sacchari* 4354.
- bagasse, Lolium, sodium hydroxide hydrolysis, production, xylose isomerase, endo-1,3- β -D-xylanase, *Streptomyces flavogriseus* 5186.
- carbohydrate composition, bagasse hydrolysates, use, carbon sources, fermentation 8577.
- fermentation, energy resources, *Bacteroides* 6156.
- fermentation, ethanol production, *Thermoanaerobacter ethanolicus* 5284.
- fermentation, 2,3-butanediol production, *Bacillus polymyxa* 5223.
- hydrolysates, D-xylose fermentation, ethanol production, yeasts 6935.
- Triticum aestivum* straw, trifluoroacetic acid hydrolysis, xylose fermentation, ethanol production, *Pachysolen tannophilus* 8657.
- Hemileia vastatrix**, development, sori, thalli, *Coffea arabica* infection 7185.
- host-pathogen interactions, *Coffea arabica*, cell culture methodology 1999.
- leaf rust, disease resistance characterization, *Coffea canephora* 305.
- leaf rust, disease resistance characterization, *Coffea* 306.
- leaf rust, disease resistance variation, *Coffea arabica* 304.
- leaf rust, genotype-environment interactions, host-pathogen interactions, disease resistance, plant breeding, *Coffea arabica*, *Coffea canephora* 2872.
- rust, *Coffea*, *Vectilium psalliotae* hyperparasitism, Malaysia 1204.
- rust, disease spread, Western Hemisphere, *Coffea* 2798.
- rust, plant breeding, disease resistance, *Coffea arabica* 6289.
- Hemin**, blood culture, effects on *Haemophilus influenzae* growth 791.
- Hemocol**, body fluids, *Glycera dibranchiata*, bactericidal activity, *Serratia marcescens* 451.
- Hemodialysis**, systems, bacteria contamination, enumeration methodology 1638.
- Hemoglobin**, levels, nodules, *Rhizobium*, comparison *Frankia*, *Parasponia*, *Myrica gale* 2898.
- levels, nodules, actinorrhizas, *Casuarina cunninghamiana*, *Myrica gale* 4605.
- Hemolymph**, pathogens effects on amino acids, larvae, *Spodoptera littoralis*, *Bacillus thuringiensis* 6912.
- o-Hemolysin**, comparison, teichoic acid, antibodies, measuring techniques, diagnosis, bacteremia, endocarditis, *Staphylococcus aureus*, man 7620.
- β -Hemolysin**, *Streptococcus*, use, detection, hemolysis, *Vibrio cholerae* 9288.
- δ -Hemolysin**, amino acid sequence, *Staphylococcus aureus* 5390.
- Hemolysins**, production, *Escherichia coli* 4706.
- production, factors affecting, *Vibrio vulnificus*, bioassays 6786.
- Streptococcus agalactiae*, biosynthesis, characterization 3404.
- Hemolysis**, assays, *Escherichia coli* enterotoxins, adsorption, filter paper 4485.
- assays, pathogenicity, *Listeria monocytogenes* 695.
- assays, rubella virus antibodies screening, man 6745.
- Brucella abortus* vaccination, tests comparison, complement fixation, cattle 1582.
- detection antibodies, togavirus, use seroepidemiology, man 4996.
- Escherichia coli*, antibiotic resistance, isolation, mice 7316.
- herpesvirus (equine) 1 detection, serum, horses 606.
- immunoassays, rubella virus infection diagnosis, man, immune status 600.
- influenza virus detection methodology comparison, hemagglutination inhibition, man 4149.
- methodology, bunyavirus antibodies detection 4164.
- Vibrio cholerae*, detection, use, *Streptococcus* β -hemolysin 9288.
- Hemorrhagic enteritis virus**, antibodies detection, enzyme-linked immunosorbent assay methodology, chickens 9281.
- antibodies, detection, gel diffusion, enzyme-linked immunosorbent assay, turkeys 4149.
- Hemorrhagic fever**, antibodies detection, indirect hemagglutination, viruses, man 7570.

Hemorrhagic fever, (continued)

amorrhagic, nephrotic syndrome, viruses, etiology, immune adherence, immunoassays 3251.

HEp-2 cells, sensitivity, poliovirus antibodies titration 5003.

Heparin, bacteria biodegradation, media use detection 9233. removal blood, use immobilization heparin lyase, *Flavobacterium* 6865.

Heparin lyase, *Flavobacterium*, immobilization, use heparin removal blood 6865.

Hepatitis, viruses, vaccines, standardization, books, conferences 4245.

Hepatitis A, immunoglobulin M detection, enzyme-linked immunosorbent assay, man 4156. outbreaks, seafood, food consumption, man 3691.

Hepatitis A virus, attenuation, fibroblasts cell culture, live vaccines, immunity, animal models 6646.

attenuation, fibroblasts cell culture, vaccination, immunity, monkeys 4074. cell culture, antigens production, immunodiagnosis methodology 5007. hepatitis A, immunoglobulin M detection, enzyme-linked immunosorbent assay, man 4156.

immunoglobulins, standardization, immunization (passive) 6618. live vaccines, attenuation, tissue culture 6634. production, cell culture, kidney, fetuses, *Macaca mulatta* 5882. vaccines, development 6592. vaccines, live, attenuation, biotechnology 6641. vaccines production 6645.

Hepatitis B, blood transfusion, disease transmission, identification, radioimmunoassay, methodology, man 646. infection, laboratories, man 2414.

Hepatitis B core antigen, immunoglobulin M, enzyme-linked immunosorbent assay methodology, man 6738.

Hepatitis B e antigen, detection, enzyme-linked immunosorbent assay 2441. enzyme-linked immunosorbent assay 5012. hepatitis B virus vaccines, safety, preparation, efficacy 6652.

Hepatitis B surface antigen, antigenic determinants, vaccines, hepatitis B virus 6612. blood donors, detection, radioimmunoassay 1546. cloning vectors, vaccines, hepatitis B virus 6597. detection, agglutination, *Staphylococcus aureus*, methodology 2443. detection, enzyme-linked immunosorbent assay 4984. enzyme immunoassay, radioimmunoassay 4983. expression, yeasts, vaccines production 6628. gene expression, cloning vectors, yeasts, hepatitis B virus vaccines production 6631.

hepatitis B virus vaccines, safety, preparation, efficacy 6652. preparation, purification, methodology 5018. production, vaccines, hepatoma tumor cell lines 6607. purification, hepatitis B virus vaccines 6593. radioimmunosorbent test 604.

receptors, albumin polymers, role liver organotropism, use vaccines production, man, Pan troglodytes 7481. specificity, sensitivity, enzyme-linked immunosorbent assay, comparison, counter immunoelectrophoresis, radioimmunoassay, passive reverse hemagglutination 7568. specificity, mammalian cells 6626.

synthetic, +fatty acids conjugate, immunogenicity, use vaccines, animal models 4071. synthetic peptides, combined vaccines, *Corynebacterium diphtheriae* toxins, Streptococcus, antibody response, mice 5219.

synthetic peptides, immunogenicity, vaccines production 6609. transfection, animal cells, vaccines production, hepatitis B virus 6594. vaccines, protein composition, preparation relationship 4070. vaccines, safety, preparation 6653. vaccines, synthetic peptides, antibodies specificity 6617.

Hepatitis B virus, e antigen, detection, enzyme-linked immunosorbent assay methodology, serum, man 6456.

enzyme-linked immunosorbent assay, detection, hepatitis B e antigen 2441. genetic engineering, vaccines production 6608. hepatitis B surface antigen, blood donors, detection, radioimmunoassay 1546. hepatitis B surface antigen, enzyme immunoassay, radioimmunoassay 4983. hepatitis B surface antigen, production, vaccines, hepatoma tumor cell lines 6607.

hepatitis B surface antigen, radioimmunosorbent test 604.

hepatitis B surface antigen, receptors, albumin polymers, role liver organotropism, use vaccines production, man, Pan troglodytes 7481. hepatitis B surface antigen, synthetic peptides, immunogenicity, vaccines production 6609.

hepatitis B surface antigen, transfection, animal cells, vaccines production 6594.

hepatitis B surface antigen, vaccines, safety, preparation 6653.

inactivation, disinfectants 472. infection, e antigen detection, radioimmunoassay solid phase methods, man 8454.

infection, diagnosis, use, radioimmunoassay, man 640. levels, detection methodology, surface water, drinking water, reviews 2384. proteins micelles, isolation, immunogenicity, vaccines, Pan troglodytes 6642. vaccines, antigenic determinants, hepatitis B surface antigen 6612. vaccines, cloning vectors, hepatitis B surface antigen 6597. vaccines, genetic engineering 2319.

vaccines, genetic engineering, antigens, characterization 6640. vaccines, hepatitis B surface antigen, hepatitis B e antigen, safety, preparation, efficacy 6652.

vaccines, hepatitis B surface antigen purification 6593. vaccines, hepatitis B surface antigen synthesis, mammalian cells 6626. vaccines, hepatitis B surface antigen, synthetic peptides, antibodies specificity 6617.

vaccines, immunogenicity, quality control 6600.

vaccines, preparation, safety, quality control 6651.

vaccines, production, conferences 6799. vaccines production, hepatitis B surface antigen expression, yeasts 6628. vaccines, production, hepatitis B surface antigen, gene expression, cloning vectors, yeasts 6631.

Hepatitis B virus, (continued)

vaccines production, immunogenicity, DNA recombination, synthetic peptides vaccines, purification, immunodiffusion chromatography 6603. vaccines, synthetic peptides 6623.

Hepatocytes, release, rats liver, *Clostridium histolyticum* proteolytic enzymes role 2573.

Hepatoma, tumor cell lines, hepatitis B surface antigen production, vaccines 6607.

Hepatin, ammonium salts, antibacterial activity, *Staphylococcus aureus* 7541.

Heptadecane, biodegradation, *Mycobacterium fortuitum*, *Mycobacterium triviale*, gas chromatography 6946.

Herbal medicines, *Alternanthera philoxeroides*, antiviral activity, cell culture, influenza A virus, influenza B virus, Sendai virus 7392. effects on *Aspergillus parasiticus* aflatoxins biosynthesis 5377.

Herbicides, antibacterial activity, *Streptomyces* soil isolates 4737.

effects on dehydrogenase, respiratory soil microorganisms 8254.

effects on growth, *Phytophthora cactorum*, Erwinia, antagonism 2177.

effects on nodulation, nitrogen fixation, inoculation, *Bradyrhizobium japonicum* Glycine max 8998. effects on soil microorganisms, crop rotation, Zea mays, Triticum aestivum 29.

effects on soil microorganisms, population levels 7296. *Gossypium hirsutum*, effects on plant diseases, *Rhizoctonia solani*, *Fusarium oxysporum* f.sp. vasinfectum 7963.

inhibition nitrification, biodegradation, soil microorganisms 3969.

inhibition, nitrification, soil 9026.

Phaseolus vulgaris, effects on *Rhizoctonia solani* root rot 1181.

soil applications, effects on, *Drechslera sorokiniana* leafspot, *Poa pratensis* 8953.

soil applications, effects on fungicides disease control, *Vigna unguiculata* damping-off 2090. toxicity, *Saccharomyces cerevisiae*, nontarget organisms, wine fermentation 2.

Herbicolin A, antibacterial activity, *Mycoplasma*, *Acholeplasma*, *Ureaplasma*, *Spiroplasma* 9.

antibacterial activity, lactic acid bacteria 4723.

Heredity, *Myzus persicae*, *Aphis gossypii*, disease transmission, potato virus Y, *Datura metel* 3827.

Heritability, disease tolerance, Glycine max, plant breeding, rot, *Phytophthora megasperma* f.sp. glycine 8085.

Herpes simplex, herpes simplex virus detection, methodology comparison, man 1537.

Herpes simplex virus, antibodies, detection, enzyme-linked immunosorbent assay 631. antigenic determinants, synthetic proteins, vaccines production, immunogenics 6639.

antigens, cloning, gene expression, vaccines production 6610. antigens, detection, immunofluorescence comparison immunoperoxidase test 6610. antiviral activity, antibodies+interferon, conjunctiva cell culture, man 2227.

antiviral activity, anti-uridylic derivatives 4764. antiviral activity comparison, 2'-nor-2'-deoxyguanosine, 9-[2-hydroxyethoxymethyl]guanine, DNA polymerase inhibition 1349. antiviral activity, distamycin A, analogs, structure-activity relationships, synthesis 6472.

antiviral agents antiviral activity, cell culture 4770.

caffeic acid antiviral activity 464.

cell culture, cell line 3242.

cell culture, detection, methodology 8436.

clinical isolates, drug sensitivity testing, 9-[2-hydroxyethoxymethyl]guanine 2231.

clinical isolates, restriction endonuclease mapping, typing 7558.

clinical isolates, typing, iododeoxyuridine sensitivity, thymidine kinase 594.

antigen characteristics 594.

detection, fibroblasts cell culture+immunoperoxidase test staining 5002.

detection, identification, immunoperoxidase test 625.

detection methodology comparison, man 1537.

DNA biosynthesis, 2'-deoxyadenosine, 2'-deoxyguanosine inhibition 6481.

DNA, cytarabine incorporation, association, vidarabine drug resistance 3067.

drug sensitivity testing, 9-[2-hydroxyethoxymethyl]guanine, immunoperoxidase test, methodology 4771.

electron microscopy, detection, antigen-antibody complexes 653.

genetic engineering, live vaccines 6622.

glycoproteins, gene expression, vaccines production 6611.

identification, DNA fingerprinting methodology 8458.

identification, typing, monoclonal antibodies, indirect fluorescent antibody test 2429.

infected BHK cells, 9-[2-hydroxyethoxymethyl]guanine effects on DNA biosynthesis 4767.

infected cells, DNA-binding protein, purification, characterization 4254.

infection, diagnosis, chemiluminescence enzyme-linked immunosorbent assay 594.

infection, diagnosis, protein A, membrane filtration 5889.

interferon antiviral activity 2233.

interferon antiviral activity, bioassays, in vitro 4773.

isolation, cell culture comparison, fibroblasts, kidney cells 4981.

nucleic acids, antiviral activity, nucleosides analogs 8328.

recombinants detection, infected cells DNA 5006.

seroprevalence, man, serum, cerebrospinal fluid, enzyme immunoassay 61.

serotyping, clinical isolates, protein A immunoassays 595.

serotyping, immunofluorescence, comparison, monoclonal antibodies, 2-bromovinyl-2'-deoxyuridine, sensitivity, methodology 655.

serotyping, monoclonal antibodies 601.

transformed cells, interferon effects on 462.

vaccines production, genetic engineering 6616.

Herpes simplex virus 1, 5'-amino-2'-5'-dideoxy-5-iodouridine, derivatives, antiviral activity 4025.

antigens, detection, enzyme-linked immunosorbent assay, cerebrospinal fluid encephalitis, man 652.

antiviral activity, 2'-deoxyuridine derivatives, structure-activity relationships 4768.

antiviral activity, (E)-5-(2-bromovinyl)-2'-deoxyuridine analogs 4763.

herpes simplex virus 1, (continued)

- antiviral activity, aliphatic amines, effects on syncytia formation 4776.
antiviral activity, antiviral agents dosage, computer programs 8323.
antiviral activity, interferon 9121.
antiviral activity, pyrimidine nucleosides analogs 7391.
antiviral activity, uridine analogs 4031.
antiviral agents antiviral activity, dosage, computer programs 8323.
2-bromovinyl-2'-deoxyuridine sensitivity, media (isolation), cell culture 607.
cell culture, antiviral activity, ribamidide 4774.
detection, biotin-avidin enhancement enzyme-linked immunosorbent assay, man 4154.
3,10-dimethyl-10-H-s-triazolo[4,3'-b']
as-triazine-15,6-b]indole, antiviral activity 4023.
DNA biosynthesis, antiviral activity, 9-(2-hydroxyethoxymethyl)guanine+vidarabine 7388.
DNA polymerase, purification, comparison DNA topoisomerase 6835.
DNA polymerase, 9-(2-hydroxyethoxymethyl)guanine, analogs, inhibition 4029.
Escherichia coli, expression, interferon, antiviral activity 4028.
glycoproteins, gene expression, antigenic determinants, use vaccines production, cell lines, mammalian cells 6591.
identification differentiation, herpes simplex virus 2, methodology, Vero cells 8457.
identification, DNA fingerprinting methodology 8458.
identification, DNA hybridization analysis, membrane filters 608.
identification, typing, monoclonal antibodies, indirect fluorescent antibody test 2429.
infected HeLa cells, 9-(1,3-dihydroxy-2-propoxymethyl)guanine, effects on, macromolecules biosynthesis 9125.
infection, interferon antiviral activity, HeLa cells, mice L cells 1350.
interferon, antiviral activity, cell culture, mice 2226.
isolation, identification, tissue culture methodology 650.
tyrosine effects on 4021.
mutants, drug resistance, arabinosyladenine, association, deoxycytomycin 9068.
mutants, resistance, phosphonoacetic acid 2193.
nucleosides analogs antiviral activity, thymidine inhibition, kinetics 460.
2'-5'-oligo(A) analogs antiviral activity, mechanisms 3065.
nucleoside biosynthesis, antiviral activity, 5-(2-bromovinyl)-2'-deoxyuridine 5743.
replication, rebinic acid effects on 9110.
reproduction, cell culture, nucleic acids pretreatment effects on 463.
resistance, phosphonoacetic acid, 1- β -D-arabinofuranosine thymine 2192.
nucleoside-diphosphate reductase, DNA biosynthesis, inhibition, antiviral activity, paracetamol, bis-N1, N8-(2,3-dehydroxybenzoyl)spermidine 8335.
thymidine kinase, DNA polymerase, loci, relationship, 9-(2-hydroxyethoxymethyl)guanine, resistance 5723.
thymidine kinase phosphorylation, sensitivity relationship.
9-(2-hydroxyethoxymethyl)guanine, (2-bromovinyl)-2'-deoxyuridine 2225.
5-(3,3-trifluoro-1-propenyl)-2'-deoxyuridine antiviral activity 5747.
uracil derivatives antiviral activity 6482.
herpes simplex virus 2
antiviral activity, interferon 9121.
antiviral activity, pyrazolo[3,4-c]pyrimidine-4(5H)-one nucleosides 9119.
antiviral activity, 9-(2-hydroxyethoxymethyl)guanine, vidarabine, arabinosyl
poxanthine, interferon, polyribonucleic acid+polyribocytidylic acid 9114.
2-bromovinyl-2'-deoxyuridine sensitivity, media (isolation), cell culture 607.
detection, biotin-avidin enhancement enzyme-linked immunosorbent assay, man 4154.
DNA biosynthesis, antiviral activity.
9-(1,3-dihydroxy-2-propoxy[methyl]-)guanine+interferon 6480.
drug resistance, 9-(2-hydroxyethoxymethyl)guanine, detection 6473.
identification differentiation, herpes simplex virus 1, methodology, Vero cells 8457.
identification, DNA fingerprinting methodology 8458.
identification, DNA hybridization analysis, membrane filters 608.
identification, typing, monoclonal antibodies, indirect fluorescent antibody test 2429.
infected HeLa cells, 9-(1,3-dihydroxy-2-propoxymethyl)guanine, effects on, macromolecules biosynthesis 9125.
infection, interferon antiviral activity, HeLa cells, mice L cells 1350.
interferon, antiviral activity, cell culture, mice 2226.
isolation, identification, tissue culture methodology 650.
2'-5'-oligo(A) analogs antiviral activity, mechanisms 3065.
resistance, phosphonoacetic acid, 1- β -D-arabinofuranosine thymine 2192.
uracil derivatives antiviral activity 6482.
detection methodology, fibroblasts, kidney cells 4988.
herpesvirus
antiviral activity, plant extracts 8325.
antiviral activity, uracil analogs.
9-(2-hydroxy-1-(hydroxymethyl)ethoxy)-methylguanine 4013.
9- β -D-arabinofuranosyladenine derivatives antiviral activity, synthesis 5748.
DNA detection, electrophoresis, mammalian cells 4977.
herpesvirus (equine) 1
antigens, detection, enzyme-linked immunosorbent assay 3246.
detection, neutralization, hemagglutination inhibition, hemolysis, serum, horses 606.
herpesvirus (pigeon)
antiviral activity, 9-(2-hydroxyethoxymethyl)guanine 6476.
herpesvirus (turkey)
Marek's disease virus, infectious bursitis virus, live combined vaccines
production, embryo fibroblasts, chickens 7486.
herpesvirus (varicella)
herpesvirus deposition, airspora, epidemiology, forests, Tsuga heterophylla 8644.
biological control, fungi antagonism, inoculum production, in vitro, Picea abies 8181.
decay fungi, wound infection, bacteria inhibition, Picea abies 7238.
decay, Populus tremula, stands 356.
epidemiology, genetic markers, mating types, plantations, Pinus 367.
growth effects on disease resistance, Picea abies, Pinus sylvestris 8169.
inhibitors, production, role host-pathogen interactions 8952.
media (selective), assays, roots 2111.
spores, samplers, catching methods, methodology 8488.
herodera davidi
herodera, Fusarium avenaceum, Fusarium oxysporum, plant diseases, Trifolium subterraneum 5411.
penetration, Trifolium subterraneum, roots, Fusarium avenaceum filtrates effects on 5524.

Heterotrophic bacteria,

- cooling water, temperature effects on glutamic acid uptake 1493.
population dynamics, lagoons, sewage treatment 9241.
sulfur cycles, soil 8984.
urea biodegradation, nitrification, soils (acid) 4671.
Heterotrophic microorganisms,
slimes, heavy metals concentration, rivers, Eire 6716.
Heterotrophy,
soil microorganisms, acid rain anions effects on 2939.
soil microorganisms, acid rain effects on 2940.
Hevea,
plantations, denitrification, soil 6356.
Hevea brasiliensis,
root rot, pathogenesis 2920.
root rot, Hippodamia lignosus, disease spread, host-pathogen interactions, kinetics 5604.
Hexachloro-cyclopentadiene,
biodegradation, industrial wastes, bacteria, fungi 3677.
Hexadecane,
biodegradation, Mycobacterium fortuitum, Mycobacterium triviale, gas chromatography 6946.
metabolism, inclusion bodies ultrastructure, Arthrobacter 5705.
n-Hexadecane,
Candida lipolytica emulsification 9039.
2-Hexadecanal reductase,
purification, *Mucor griseo-cyanus* 5981.
Hexahydro-1,3,5-trinitro-1,3,5-triazine,
biodegradation, composting, soil decontamination 7511.
Hexametaphosphate,
+p-hydroxybenzoic acid esters, antibacterial activity synergism, *Escherichia coli* 1054.
Hexamine silver,
waxes, use, *Legionella pneumophila* demonstration 3289.
Hexazinone,
toxicity, biodegradation, soil microorganisms 2175.
Hexetidine,
in vitro, drug synergism, antibacterial activity, *Streptococcus mutans* 5860.
Hexokinase,
glucose stereospecificity, catalysis, *Saccharomyces cerevisiae* 6853.
Hexons,
adenovirus (human) 5, antibodies, counter immunoelectrophoresis, immunodiagnosis 1439.
Hibiscus subdariffa,
plant extracts, antifungal activity, aflatoxins biosynthesis, *Aspergillus flavus* 7897.
Hides,
microorganisms biodegradation, books 1683.
High-altitude environments,
Coriaria seedlings, mines, ectomycorrhizas formation 5547.
High-performance liquid chromatography,
acetaldehyde 2,4-dinitrophenylhydrazine measurements, acetaldehyde analysis, *Streptococcus lactis* 6927.
aflatoxin B1 assays, food contamination 7044.
Coriaria toxins 3741.
detection, ochratoxin A, contamination, Triticum aestivum by-products 5367.
detection, pentoxifylline, metabolites, fungi, bacteria, extracts 8433.
detection, phenomene, Phoma destructiva infection, Lycopersicon esculentum 8824.
erythromycin A, erythromycin B, fermentation, *Streptomyces erythraeus* 3111.
exotoxins, assays, insecticides, biological control, *Bacillus thuringiensis* 2766.
isolation, pellicolyn, pellicolyn, baecocystin, alkaloids, *Paecilomyces* 3751.
methodology, bacteriochlorophyll c structure, *Prosthechloris aestuarii* 9315.
methodology, detection, mycotoxins, animals feeds 7053.
penicillin V 1395.
purification, proteins, use vaccines, Sendai virus 6649.
ribosomal proteins purification methodology, *Escherichia coli* 7660.
triacetylmethyluracil, antibiotic MM 19290, streptoviridin 1425.
vancomycin 3152.
High-pressure liquid chromatography,
aureofungin, hamycin, isolation, antifungal activity 5800.
avoparcin 3154.
azilicillin, serum 509.
cefazolin, serum, urine 500.
neo-enactins, physicochemical properties, biological properties, isolation, *Streptoviridium olivetorum* subsp. *neoenactinus* 2288.
poly- β -hydroxybutyrate, Rhizobium japonicum, bacteroids, characterization 1653.
purification, techniques, *Bipolaris victoriae* 7910.
separation methods, bacteria ubiquinone 1652.
thin-layer chromatography, analysis, aflatoxins, fatty acids fluorescence, grain, Zea mays 8726.
tubercidin, *Streptomyces tubercidicus* 4378.
vancomycin, serum 8366.
Hippophae
nodulation, actinorhizas, Frankia 6149.
Hippophae rhamnoides,
Glomus fasciculatus symbiosis 2927.
nitrogen fixation, Frankia 4594.
Hippuric acid,
Campylobacter, Clostridium, Streptococcus, detection, gas chromatography, methodology 794.
Hirsutella thompsonii var. synnematos,
liquid culture, conidia production, inoculum, biological control, Phyllocladus oleivora 3363.
Histamine,
levels, boar, fermentation 6131.
Histidine,
biosynthesis, Serratia marcescens, stabilization mechanisms 5971.
residues, N.M.R., role active sites, *Streptomyces erythraeus* 1757.
residues, chemical modification, active sites, α -D-glucosidase, *Saccharomyces cerevisiae* 6851.
residues, chemical modification, sarcosine oxidase, *Corynebacterium* 12.
residues, role, p-(bromocetyl)-amino[phenyl] arsenoxide inhibition, pyruvate dehydrogenase (lipamide) dihydrolipamide acetyltransferase dihydrolipamide dehydrogenase complex activity, *Escherichia coli* 3522.
L-Histidine,
binding, histidine-binding protein, conformation, N.M.R., *Salmonella typhimurium*

L-Histidine, (continued)

- 6811
Histidine ammonia-lyase,
 activity distribution, soil 8211.
 formation, 2-ketoglutarate regulation, *Bacillus subtilis* 4281.
 induction, drug resistance, nitrofurantoin, *Vibrio cholerae* 3037.
Histidine decarboxylase,
 thermal stability, *Micrococcus* 8594.
Histidine-binding protein,
 L-histidine binding, conformation, N.M.R., *Salmonella typhimurium* 6811.
Histidinomycin,
 purification, structure, antifungal activity 3137.
Histone H2B,
 role, polyamines biosynthesis regulation, *Escherichia coli* 2655.
Hiatoplasma capsulatum,
 antifungal activity, 2-methylquinolines 5740.
 antigens extracts, disinfection, thimerosal, formaldehyde, clinical microbiology 810.
 blood culture, recovery methodology, centrifugation+lysis 814.
 itraconazole antifungal activity, new records 9104.

Hog cholera virus,

- antibodies, detection, immunoperoxidase test, neutralization, pigs 6743.
Homobasidiomycetes,
 ecomycorrhizas, spore germination, environmental factors, roots exudates effects on 2130.

Homocysteine,

- biosynthesis, *Pseudomonas* 4268.
 methylation, L-methionine production, methanol utilization, *Pseudomonas*, methylotrophic bacteria 4264.

Homoneoctic acid,

- intermediates, macrolide antibiotics biosynthesis, *Streptomyces griseus* 6575.

Homoserine,

- biosynthesis, *Brevibacterium flavum* 3436.

Homoserine,

- biosynthesis, threonine effects on, *Brevibacterium flavum* 857.

Homocystolates,

- cytoplasmic inheritance, *Saccharomyces cerevisiae*, flocculation, fermentation 5268.

Honduras,

- Musa paradisica*, sigatoka, *Mycosphaerella fijiensis* var. *difformis* 8806.

Honeydew,

- Aphidids, enhancement, *Septoria nodorum*, *Cochliobolus sativus*, infection, *Triticum aestivum* 3806.

Hop stunt disease virus,

- plant diseases, Cucurbitaceae, pathogenesis 4543.

- plant diseases, Humulus lupulus, disease reservoirs, epidemiology 4545.

- stunt, pathogenesis, morphology, Humulus lupulus 8045.

Hordeum,

- plant breeding, powdery mildew disease resistance 2839.

- powdery mildew, Erysiphe graminis, disease resistance 5501.

- seed treatments, insecticides± fungicides, chemical control, Rhopalosiphum maidis 6317.

Hordeum distichon,

- phytoxicity, crop residues, digestion (anaerobic), reduction, soil microorganisms decomposition 2936.

Hordeum spontaneum,

- plant breeding, enzyme polymorphism correlation powdery mildew disease resistance, Erysiphe graminis f.sp. hordei 7209.

- plant breeding, germplasm, disease resistance, powdery mildew, Erysiphe graminis f.sp. hordei 5496.

- Puccinia hordei, parasitism, characterization 7968.

Hordeum vulgare,

- Alternaria alternata leaf blotch, Aspergillus varicolor biological control 2083.

- barley yellow dwarf virus infection, pathology, Hungary 7949.

- brown rust, Puccinia hordei, pathogenesis 5424.

- carbon fixation enzymes, ribulosebiphosphate carboxylase, activity, powdery mildew, Erysiphe graminis f.sp. hordei inhibition 5434.

- crop fields, denitrification, gas production, nitrogen nitrous oxide ratio 5672.

- crop fields, wind dispersal, phytopathogenic fungi spores, modelling 5403.

- crop residues, smoke, antifungal activity, fungi 8319.

- cultivars, mixed culture, incidence, Erysiphe graminis powdery mildew, leafspot, Helminthosporium, Drechslera 2841.

- cytopathogenicity, net blotch, Pyrenophora teres 1982.

- deposition, ureidinospores, Puccinia hordei, aerosols, virulogenicity 8786.

- disease resistance breeding, Puccinia hordei leaf rust 301.

- disease resistance, hypersensitive response, host-pathogen interactions, rust, Puccinia hordei, models 2860.

- disease resistance, mildew, inoculation, avirulent Erysiphe graminis f.sp. hordei 3882.

- disease resistance, powdery mildew, genetic analysis, plant breeding association 8081.

- disease resistance, Puccinia hordei, hybridization, Pa3 gene, Pa7 gene 8063.

- disease resistance, Rhynchosporium secalis scald, Erysiphe graminis powdery mildew, Helminthosporium teres net blotch, genetic variance, plant breeding 316.

- dose-response effects, inoculation, barley yellow dwarf virus 8763.

- Drechslera graminea infection, epidemiology, Turkey 1987.

- ergosterol, use, detection, Drechslera graminea, infection 7981.

- Erysiphe graminis infection, disease resistance, genetic control 2067.

- flour, food contamination, nivalenol, vomitoxin, Fusarium graminearum, levels 2737.

- fungicides, field trials, effects on, yield 327.

- grain, food contamination, trichothecenes, gas chromatography 7107.

- grain, storage, Penicillium isolation, identification 7197.

- growth, nutrient uptake, inoculation, vesicular-arbuscular mycorrhizas 7257.

- host-pathogen interactions, powdery mildew, genotypes, virulence, Erysiphe graminis f.sp. hordei 8791.

- infectivity, Typhula incarnata, dikaryons, monokaryons, recombination 2788.

- isolates, Septoria nodorum, secreting, role, pathogenicity, temperature effects on 1994.

- leaf blotch, Rhynchosporium secalis, triadimenol sensitivity 5530.

- leaves culture, cultivars effects on Puccinia graminis f.sp. tritici 1991.

- leaves, polyribosomes translation activity, Erysiphe graminis f.sp. hordei infection 251.

- nutrient mutation, role powdery mildew disease resistance 3854.

- ocrotio acid, anions, growth, stimulation, vesicular-arbuscular mycorrhizas

Hordeum vulgare, (continued)

5623.

- patch, Rhizoctonia solani, surveys, soils (calcareous) 255.

- Penicillium, viomellein, contamination, nephropathy, pigs 224.

- plant breeding, disease resistance, barley yellow mosaic virus 4569.

- plant breeding, disease resistance, powdery mildew, Erysiphe graminis f.sp. hordei, Denmark 2880.

- plant breeding, disease resistance, rust, Puccinia graminis f.sp. secalis 8073.

- plant breeding, disease resistance, smut, Ustilago hordei 2857.

- plant breeding, gene frequency, disease resistance 2863.

- planting density, crop fields, relationship barley yellow dwarf virus incidence 256.

- powdery mildew colonies enumeration 1129.

- powdery mildew, disease control, avirulent strains inoculation, Erysiphe graminis f.sp. hordei 2066.

- powdery mildew, disease control, avirulent strains inoculation, Hordeum vulgare 2066.

- powdery mildew disease resistance, Erysiphe graminis 5498.

- powdery mildew, Erysiphe graminis, disease control, use, antitranspirants 291.

- powdery mildew, Erysiphe graminis f.sp. hordei, factors affecting epidemiology 5422.

- powdery mildew, Erysiphe graminis f.sp. hordei, factors affecting conidia production 7957.

- powdery mildew, host-pathogen interactions, germ tubes, appressoria, penetrations, Erysiphe graminis f.sp. hordei 8788.

- powdery mildew incompatibility, carbon dioxide exchange 1130.

- Pyrenophora teres infection, factors affecting pathogenesis 7946.

- Pyrenophora teres net blotch, Rhynchosporium secalis leaf blotch, barley yellow dwarf virus effects on disease resistance 1196.

- rates, Puccinia hordei host range, disease resistance 1995.

- rhizosphere microorganisms, carbon utilization, release 2930.

- Rhynchosporium secalis, scald disease, pure culture, biosynthesis, rhynchosporides 3801.

- seedlings growth, stimulation, colonization, soil microorganisms 3936.

- seeds, barley stripe mosaic virus, infection, effects on, yield 4516.

- Septoria infection, reviews 1985.

- Septoria nodorum virulence 7148.

- straw, decomposition, nutrient cycles, soil microorganisms 5683.

- straw, decomposition, soil microorganisms, leaching effects on 2942.

- straw, pretreatment, use, alkalis, cellulase, effects on bacteria fermentation 1045.

- take-all, Gaeumannomyces graminis var. tritici, senescence effects on 7954.

- virulence, plant breeding, disease resistance, host-pathogen interactions, virulence, powdery mildew 2862.

- yield components, Cochliobolus sativus root rot 5428.

- yield, net blotch, Drechslera teres, Denmark 8782.

- yield, powdery mildew, brown rust, disease control, tridormoph, benodanil 2900.

- Homonea dematioides**,

- biodegradation, forest products, colonization, succession, preservatives, effects on 1241.

Hormones,

- mediation, tumorigenesis, bacteria, pathogens, plants 8856.

Horseshoe peroxidase,

- +antiseria, stains, bovine diarrhoea-mucosal disease virus, detection, microscopy 4147.

- avidin biotinylated, complex, use, Spirochaetaceae microscopy 3283.

- +2,2'-azino-di(3-ethyl benzthiazoline-6-sulfonic acid) media, bacteria detection, hydrogen peroxide production 5900.

Horses,

- contagious equine metritis, Haemophilus equigenitalis, media (isolation), microscopy 7107.

- contagious equine metritis, Haemophilus equigenitalis isolation, incubation time 7573.

- erythrocytes sialoglycoproteins, use, latex agglutination, Epstein-Barr virus Paul-Bunnell antibody detection 1553.

- serum, herpesvirus (equine) 1 detection, neutralization, hemagglutination infection, hemolysis 606.

Horticulture,

- crops, disease resistance, Dematophora necatrix root rot 2073.

Hospitals,

- antibiotics use, bacteria antibiotic resistance relationship 3030.

- carpets, epidemiology, nosocomial infection, bacteria, man 581.

- Clostridium difficile colitis outbreaks, biotyping methodology, man 1641.

- environmental hygiene, nosocomial infection, epidemiology, disease control 152.

- environmental studies, water supplies, epidemiology, Legionnaire's disease, man 9251.

- Ethiopia, blood culture, clinical isolates, bacteria, antibiotic sensitivity testing 7400.

- food, Pseudomonas aeruginosa isolation 5347.

- fungi, air spora 5864.

- laundry washing, bacteria enumeration 3226.

- Legionella pneumophila, culture methodology, drinking water isolates 789.

- Pseudomonas aeruginosa clinical isolates, antibiotic sensitivity testing 4800.

- solid wastes, microorganisms, contamination 4963.

- Staphylococcus aureus disinfection, lactic acid bacteria antagonism 3227.

- surgery, disease control, antiseptics 1518.

- waste disposal, environmental hygiene, pathogens 2359.

- wastes, pathogens, sanitation, waste disposal 1520.

- water supplies, disease transmission, Legionella pneumophila, Legionnaire's disease, Legionella micdadei, Pittsburgh pneumonia agent 5854.

- water supplies, isolates, Legionella pneumophila 4931.

- water supplies, Legionella pneumophila isolation 1498.

- water supplies, Legionnaire's disease, epidemiology, British Isles, man 3215.

Host alternation,

- Comptonia peregrina, Cronarium comptoniae, rust, epidemiology, Pinus banksiana 5602.

- Phakospora pachyrhizi, rust, host range, disease reservoirs, Leguminosae 794.

- Host plants**,

- cultivars, effects on Puccinia graminis f.sp. tritici infection, leaves culture 1991.

- effects on susceptibility, Beauveria bassiana, biological control, Lepitotarsa decemlineata 2651.

- fireblight, reviews 7166.

- host-parasite interactions, crown gall, cell proliferation, Agrobacterium 8855.

- host-pathogen interactions, genetic analysis, host specificity, bacteria, viruses, fungi 8767.

plants, (continued)

Platanus bainesii, root hairs symbiosis, *Rhizobium leguminosarum*, *Bradyrhizobium* (apomonic, role lectins 6382).
plant range,
 bean yellow mosaic virus, clover yellow vein virus, white clover mosaic virus, *Trifolium* 1113.
Ascomycetes psorophorae, pathogens, use biological control, *Culicidae* 4395.
 comparison, *Agrobacterium tumefaciens*, plasmid pTiAg63, plasmid pTiA6, induction, tumors 8866.
 cucumber brown virus, mosaic disease, *Cucumis melo* 8819.
Helicoverpa longius vectors, *Spiroplasma stunt*, *Mycoplasma bushy stunt* 7960.
 horecraze ring mottle virus, disease transmission, *Aphididae*, *Togo* 3828.
 fusarium, interspecific relationships, insects, biological control, reviews 5215.
 fusarium tabacinum, plant diseases, pathogenicity, *Australia* 7126.
 glycine mottle virus new records, spatial distribution, classification, *Glycine tomentella* isolates, *Australia* 5404.
Helminthosporium sativum, spot blotch, *Panicum virgatum* 2794.
 insecta, biological control, *Erynia pieris* 6906.
 Marssonina castagnei, cultivars, *Populus* 365.
 pathogenicity, *Marssonina brunnea*, *Populus* 357.
 pathogens, plant diseases, geographical distribution, *Seychelles* 5398.
 "Pachopora pachytrich", rust, host alternation, disease reservoirs, *Leguminosae* 7940.
 phytopathogenic fungi, ecological distribution, India, new records 1963.
 pyridazoles, macrobide antibiotics, antibiotic resistance, *Streptococcus* 3025.
 potato leaf roll virus, disease transmission, reviews, *Myzus persicae* 4553.
 potyvirus plant viruses 234.
Puccinia hordei, *Hordeum vulgare* races, disease resistance 1995.
 rust fungi, *India* 2036.
Sclerotium cepivorum, disease resistance, *Liliaceae* 8043.
Sclerotium cepivorum, while root, plants 1156.
Septoria spraguei, plant diseases, incidence 1134.
Spiroplasma citri, *Barbarea vulgaris*, *Brassica kaber*, capsella bursa-pastoris 4557.
 tobacco streak virus isolation, characterization 4565.
 tomato yellow top virus, *Solanaceae* 7180.
 watermelon mosaic virus, plant diseases, *Cucumis sativus*, *Lagenaria siceraria*, *Morone* 6270.
 wilt, *Pseudomonas solanacearum*, crops 7177.
 zucchini yellow mosaic virus, USA, *Florida* 3815.
plant specificity,
Agrobacterium rhizogenes, *Vitis vinifera* 269.
Avena sativa, *Helminthosporium victoriae* phytotoxins 7902.
 host-pathogen interactions, host plants, genetic analysis, bacteria, viruses, fungi 8767.
 mycorrhizas, characterization, plants 8974.
Rhizobium, *Leguminosae* 9004.
 (f)celluladiella wagneri, morphology, variants, *Pseudotsuga menziesii*, *Pinus ponderosa* 4613.
plant systems,
Escherichia coli, *Cellulomonas fimi* cellulase genes, transformation, gene expression 6018.
Escherichia coli minicells, use cDNA gene expression analysis 577.
est-parasite interactions,
Agrobacterium, crown gall, cell proliferation, host plants 8855.
 host-pathogen interactions, predator-prey interactions, *Spodoptera littoralis*, *Bacillus thuringiensis*, *Zeale chlorophthalma*, *Paederus alferii*, *Egypt*, *Arab Rep.* 128.
Phymatolobium omnivorum, *Gossypium hirsutum*, observation methods, equipment 2526.
est-pathogen interactions,
Escherichia polyphaga, *Legionella pneumophila*, media (enrichment), isolation methodology 2485.
Acremonium zonatum penetration, leaves, biological control, *Eichhornia crassipes* 8827.
 bacteria, plants, reviews 4497.
Diadiorium carigenum, scab, leaves histopathology, disease resistance, *Carya illinoensis* 3814.
 disease resistance, plant breeding, reviews 3871.
 disease resistance, plant cells culture, role phytoalexins, reviews 2056.
 disease resistance, rust, *Puccinia hordei*, models, *Hordeum vulgare* 2860.
 epidemiology, disease resistance, plant breeding, crops 2866.
Erwinia chrysanthemi, disease resistance, *Zea mays* 3680.
Cryptosphaeria chlorosporum, powdery mildew, disease resistance, *Curcubita moschata* 3262.
Cryptosphaeria graminis, powdery mildew, pathogenicity genes, disease resistance genes, *Hordeum vulgare* 2861.
Cryptosphaeria graminis f.sp.hordei, plant diseases, relative humidity effects on 1962.
Cryptosphaeria graminis f.sp.hordei, powdery mildew, genotypes, virulence, *Hordeum vulgare* 8791.
Cryptosphaeria graminis f.sp.hordei, powdery mildew, germ tubes, appressoria, penetration, *Hordeum vulgare* 8788.
 evolution, population genetics, plant diseases 1106.
 genetic analysis, host specificity, bacteria, viruses, fungi 8767.
 genotype-environment interactions, disease resistance, plant breeding, reviews, crops 2868.
Emileia vastatrix, *Coffea arabica*, cell culture methodology 1999.
Emileia vastatrix, leaf rust, disease resistance, plant breeding, *Coffea arabica*, *Coffea canephora* 2872.
 interbasidion annosum, production, growth inhibitors 8952.
 est-parasite interactions, predator-prey interactions, *Spodoptera littoralis*, *Bacillus thuringiensis*, *Zeale chlorophthalma*, *Paederus alferii*, *Egypt*, *Arab Rep.* 128.
 lactuca sativa, virulence genes, recombination, linkage, sexual reproduction, disease resistance genes, *Bremia lactucae* 2840.
 lectins effects on spore germination, *Tilletia caries*, *Puccinia graminis*, *Aspergillus flavus* 3877.
Leucopora lini, rust, peroxidase activity, lignin biosynthesis, incompatibility, *Linum usitatissimum* 8046.
 models, plant diseases, computer applications 3767.
 ectria coccinea var.faginata, phenols levels, bark, *Fagus grandifolia* 8188.
Erionia circinata, phytotoxins, effects on gene expression, pc locus, *Sorghum* 4519.
Erwinia vulgaris, organelles, *Colletotrichum lindemuthianum* 7142.
Phymatolobium omnivorum, *Sorghum bicolor* 5437.
 phytopathogenic fungi, disease resistance, genotype-environment interactions,

Host-pathogen interactions, (continued)

plant breeding, crops 2865.
 phytopathogenic fungi, disease resistance, plant breeding, *Vitis vinifera*, *Coffea*, *Cocos*, *Ficus carica* 2869.
 phytopathogenic fungi, in vitro growth, plant cells monosaccharides 7125.
 phytopathogenic fungi, mathematical models, population density, disease resistance, plant diseases 2772.
 phytopathogenic fungi, roots, agricultural practices, *Triticum aestivum* 3807.
 phytophthora megasperma, disease resistance, *Medicago sativa* 8887.
 phytophthora megasperma f.sp.glycinea, hyphae, α -mannans localization, *Glycine max* 7941.
 Phytophthora megasperma, ultrastructure, disease resistance, *Medicago sativa* 8888.
 plant diseases, *Alternaria* toxins, reviews 5393.
 plant diseases, reviews 4494.
 plant viruses, plant genomes, structure-activity relationships, books, conferences 3391.
 powdery mildew virulence, disease resistance, plant breeding, varieties, *Hordeum vulgare* 2862.
Pseudomonas syringae infection, stimulation phytoalexins production, cell culture, *Glycine max* 2058.
Puccinia graminis, *Puccinia recondita*, races, virulence genes, disease resistance genes, plant breeding, *Triticum aestivum* 2858.
Puccinia graminis f.sp.tritici, rust, disease resistance, *Triticum aestivum* 8092.
 relationship biological control, weed control 3891.
Rigidoporus lignosus, root rot, disease spread, kinetics, *Hevea brasiliensis* 5604.
Sclerospora graminicola, downy mildew, geographical variations, *Pennisetum americanum* 5431.
Sclerospora graminicola, downy mildew, pathogenicity, isolates, comparison, Africa, Asia, *Pennisetum khipoides* 2796.
Sclerospora graminicola, downy mildew, *Pennisetum americanum* 7973.
 specificity, plant diseases 1102.
Ustilago hordei pathogenicity, smut, genetic analysis, disease resistance, plant breeding, models, *Hordeum vulgare* 2857.
Ustilago violacea, models, islands biogeography, *Viscaria vulgaris* 3840.
 virulence, plant diseases 8765.
Xanthomonas campestris pv.malvacearum, blight, *Gossypium hirsutum*, reviews 3846.
hosts,
 bacteria, adsorption, phages enumeration methodology, water 2408.
 tobacco ringspot virus, tomato ringspot virus, weeds 3818.
Housing,
 airborne microorganisms, cattle 6722.
HT-2 toxin,
 biosynthesis, *Fusarium solani* var.coeuruleum, potatoes 5372.
 fungi, liquid chromatography assays, *Triticum aestivum*, *Saccharum cereale* 3739.
Humic acid,
 biodegradation, activated sludge, γ radiation treatment, leachates 1489.
Humic acids,
 effects on production, biomass, single-cell protein, peat hydrolysates, *Candida tropicalis* 6809.
Humicola,
 β -D-glucosidase characterization 1740.
 immobilized cells, rifamycin oxidase activity 5083.
 immobilized cells, rifamycin production 4054.
Humus,
Humus laeugit diseases 1593.
 malate dehydrogenase, purification, characterization, comparison, *Mucor pusillus* 8576.
Humidifiers,
 gram-negative bacteria endotoxins, allergic alveolitis, man 1943.
 textile industry, *Cytophaga endotoxins*, allergic alveolitis, man 1944.
Humidity,
 effects on aflatoxin B1 levels, manure, chickens 6208.
Vicia faba, effects on *Botrytis fabae* infection pathogenesis 5413.
Humification,
 carbon sources, decomposition, biomass levels, soil microorganisms, clays 2938.
 organic matter decomposition, mathematical models, soil microorganisms 5638.
Humulus lupulus,
 American hop latent virus incidence, Germany, Fed. Rep. 6260.
 plant diseases, hop stunt disease virus, disease reservoirs, epidemiology 4545.
Pseudoperonospora humuli downy mildew, disease control, companion, disease resistance cultivars, pruning, fungicides, reviews 1170.
 stunt, pathogenesis, morphology 8045.
Verticillium albo-atrum pathogenesis, colonization correlation disease resistance 7207.
Verticillium albo-atrum virulence, relationship conidia antigenic characteristics 2006.
 wilt, pathogenicity, *Verticillium albo-atrum* 5459.
Humus,
 dynamics, soil microorganisms role, biochemical characteristics 2148.
 enrichment, ameba population dynamics, fungi effects on 4629.
 formation, pathway, microorganisms 8965.
 mineralization, carbon, nitrogen, soil pH 5656.
 nitrogen cycle, *Picea sitchensis* plantations 8167.
 production, decomposition, litter, plant debris, *Pinus pumila*, microorganisms 3952.
 soil microorganisms thiophosphate sulphurtransferase, forests, *Picea* 2916.
 xenobiotics binding, soil microorganisms association 1258.
Hungary,
 barley yellow dwarf virus, infection, *Hordeum vulgare*, pathology 7949.
 drinking water, incidence, *Pseudomonas aeruginosa* 4939.
Zea mays, leafspot, *Macrophoma zeae* 7969.
Hyadaphis foeniculi,
 vectors coriander feathered red-vein virus, USA, California 3822.
Hyalella azteca,
 association, bacteria, methodology, characterization, drinking water, dissection 6712.
Hyalothridium maydis sp.nov.,
 leafspot, *Zea mays* 7983.
Hyaluronate lyase,
 extracellular enzymes, propylene phenoxetol inhibition, *Propionibacterium acnes* 4725.
Hyaluronidase,
 activity determination, bacteria media (culture), turbidity methodology 3265.
 production, *Streptococcus* group A 4336.
 production, *Streptococcus* groups 8540.

Hybridization,

detection, potato spindle tuber viroid, *Solanum tuberosum* 8861.
Hordeum vulgare, *Pst* gene, *Pst* gene, disease resistance, *Puccinia hordei* 8063.
Neurospora crassa colonies filters, methodology 2534.
 spot, plant viruses infection diagnosis, crops 7924.
 strains development, *Saccharomyces*, mutation, methodology 7801.

Hybridization analysis,

coliforms tetracycline resistance incidence, feces, man 1316.
 detection, subterranean clover red leaf virus, plants, *Aulicorhynchus solani*, methodology 4151.
 DNA, cytomegalovirus (human), use, 2-acetylaminofluorene, enhancement, fluorescent probes, methodology 9282.
 DNA, diagnosis, Chlamydia trachomatis, methodology 9313.
 DNA, Escherichia coli detection, water, enterotoxigenic genes probes 1087.
 DNA, herpes simplex virus 1, herpes simplex virus 2, identification, membrane filters 608.
 DNA, methodology, potato spindle tuber viroid identification 8451.
 DNA, *Neisseria gonorrhoeae*, use, differential diagnosis, urethritis, non-specific urethritis, man 679.
 DNA, probes, vesicular stomatitis virus defective interfering particles detection 4987.
 DNA, Salmonella detection, food contamination 673.
 DNA, T cell leukemia virus proviruses, leukemia cells 5884.
 DNA, varicella-zoster virus detection, cell culture 8452.
 Escherichia coli identification, enterotoxigenic production association 1934.
 nucleic acids, enterovirus detection, coxsackievirus B3 DNA use 4979.
 outer membranes membrane proteins ompA gene detection, Enterobacteriaceae 1616.
 streptomycin, kanamycin resistance genes, transposon Tn5 442.
 tobacco mosaic virus RNA detection, plants, tissues, protoplasts 4499.

Hybridoma,

monoclonal antibodies, barley yellow dwarf virus, characterization 5892.
 monoclonal antibodies, production, use immunodiagnosis, *Legionella pneumophila* 2501.
 monoclonal antibodies, soybean mosaic virus, lettuce mosaic virus, maize dwarf mosaic virus, use radioimmunoassay, diagnosis, plant diseases 4998.
 production, monoclonal antibodies, use, *Legionella pneumophila* serotyping 2518.

Hydrangea macrophylla,

isolation, plant viruses, hydrangea mosaic virus, antigenic characteristics 2017.

Hydrangea mosaic virus,

plant viruses, isolation, Hydrangea macrophylla, antigenic characteristics 2017.

Hydraulica,

crop residues, decomposition, effects on soil microorganisms percolation 7509.

Hydrazides,

aspartic acid, inhibition, growth, *Pseudomonas pseudomallei*, *Salmonella typhimurium* 8302.

(*o*)-Hydroxybenzoyl-capsulapapain,

antibacterial activity, synthesis 4823.

p-Hydrobenzoic acid,

esters, antibacterial activity, *Escherichia coli* 1330.

Hydrocarbon-degrading bacteria,

biodegradation, petroleum 3987.
 hydrocarbons biodegradation, plasmids, genetic analysis, reviews 8284.
 petroleum biodegradation 3985.
 population levels, water chemistry, oil pollution, estuaries 6399.
 use oil recovery, reservoirs, shales, reviews 8286.

Hydrocarbons,

alicyclic ring, biodegradation, reviews 8277.
 aromatic compounds, biodegradation, reviews 8278.
 biodegradation, plasmids, genetic analysis, reviews, hydrocarbon-degrading bacteria 8284.
 biodegradation, *Pseudomonas aeruginosa* 4683.
 biodegradation, *Pseudomonas*, mechanisms 3988.
 biodegradation, reviews 8276.
 biodegradation, reviews, books 8495.
 biodegradation, sewage microflora, waste water, oil installations 2374.
 biodegradation, soil, sewage sludge, applications, microorganisms, role 4686.
 carbon sources, *Aspergillus flavus*, proteinase, α -amylase, activity, association 2189.
 carbon sources, fermentation, single-cell protein production, reviews 8288.
 carbon sources, nutrient requirements, L-lysine production, *Arthrobacter globiformis* 4265.
 gases, metabolism, reviews, microorganisms 8283.
 metabolism, *Acinetobacter calcoaceticus* growth characterization, cells partition 3006.
 metabolism, biodegradation, isobutane, propane, *Nocardia paraffinicum*, oxygenase activity 8275.
 metabolism, growth, *Cladosporium resinae* 1301.
 metabolism, production, single-cell protein, amino acids, fuels, methylotrophic bacteria 5706.
 metabolism, *Pseudomonas aureofaciens*, wells, contamination 1497.
 metabolism, surfactants production, surface activity, *Acinetobacter calcoaceticus* 8629.
 nutrient uptake, *Acinetobacter calcoaceticus*, role extracellular cell membranes, particles 7308.
 oil and gas industry, wastewater treatment, industrial effluents, biodegradation, *Pseudomonas aeruginosa*, Ept 2130.
 oxidation, catalysts, methylotrophic bacteria 425.
 oxidation, mixed culture, *Pseudomonas*, *Mycobacterium* 7312.
 oxidation, wastewater treatment, role plasmids, *Acinetobacter lwoffii* 7309.
 production, aerobic conditions, microorganisms 9034.
 substrates, nitrogen utilization, growth, *Candida guilliermondii* 8289.
 utilization, L-lysine production, *Micococcus varians* 1732.
 utilization, *Mycobacterium phlei*, growth, metabolism 422.

Hydrochloric acid,

pretreatment, cellulose, hydrolysis, cellulase 3656.

Hydrocortisone,

production, immobilized cells, *Citrullaria lunata* 107.
 supersaturation, 3-oxosteroid A'-dehydrogenase activity, immobilized cells, *Arthrobacter simplex* 3523.

Hydrodynamics,

mass transfer, glucose isomerase, immobilized enzymes, mathematical models, reactors, *Streptomyces* 5168.

Hydrogen,

effects on *Rhizobium leguminosarum*, nitrogen fixation, nodules, *Plasmodium sativum* 2987.
 gas production, nitrogen fixation, environmental chambers, *Leguminosae* 2986.

Hydrogen, (continued)

gas production, temperature, light intensity effects on, *Rhodospseudomonas capsulata* 5219.
 immobilized enzymes kinetics, effects on 4356.
 inhibition, methanogenesis, immobilized cells 7304.
 metabolism, methanogenesis, carbon monoxide, carbon sources, *Methanobacterium barkeri* 3982.
 production, bacteria 3584.
 production, bioreactors, Enterobacteriaceae 6923.
 production, immobilization, hydrogenase+ferredoxin+chloroplasts 5161.
 production, immobilized cells, *Rhodospseudomonas* 3559.
 production, marine microorganisms 3582.
 production, molasses conversion, immobilized cells, *Clostridium butyricum* 3577.
 production, *Rhodospirillaceae*, use, organic acids, nitrogen sources association 1843.
 uptake, cosmids, optimization, nitrogen fixation, *Bradyrhizobium japonicum* 899.
 uptake, methanogenic bacteria, measuring techniques 3263.
 Vitis vinifera content, relationship, fermentation wine, *Saccharomyces ellipsoideus* 7793.
 xanthine oxidase, hypoxanthine, milk, inhibition, dairy starters 7863.

Hydrogen bacteria,

chemotautography, screening, autodiagraphy 3261.
 methanogenic bacteria, mixed culture, acetic acid conversion, methanogenesis 3984.

Hydrogen bonding,

N.M.R., I.R., spectroscopy, toxins, *Helminthosporium carbonum* 7911.
 role, secondary structure, rosetoxin B, *Trichothecium roseum* 8756.

Hydrogen dehydrogenase,

purification, *Alcaligenes eutrophus* 5997.

Hydrogen fluoride,

hydrolysis, *Populus tremuloides* wood, sugars utilization, 2,3-butanediol production, *Klebsiella pneumoniae* 8632.
 Phaselos vulgaris, leaves lesions, *Xanthomonas campestris* var. phaselos, effects on 7133.
 pretreatment, lignocelluloses, biodegradation, *Chaetomium cellulolyticum*, *Sporothium pulverulentum*, single-cell protein production 1712.
 pretreatment, wood, hydrolysis fermentation, ethanol production, *Zymomonas mobilis*, *Clostridium saccharolyticum* 5270.

Hydrogen peroxide,

antibacterial activity mechanisms 4007.
 antifungal activity, *Aspergillus fumigatus* spores, *Candida albicans* 4014.
 bioaccumulation, *Streptococcus lactis*, sugars fermentation 2686.
 -cellulase, ethanol production, lignocelluloses fermentation 5303.
 disinfection 1510.
 free radicals, cellulose biodegradation, brown rot, *Poria placenta* 6173.
 +heat, disinfection, septic tanks effluents 9243.
 +hypochlorite, bactericidal activity, cytotoxicity, *Peptostreptococcus anaerobius*, *Escherichia coli* 6445.
 pretreatment, lignocelluloses, cellulolytic enzymes activity, *Trichoderma reesei* 3652.
 production, bacteria detection, 2,2'-azino-di(3-ethyl benzthiazoline-6-sulfonic acid)+horseradish peroxidase media 5900.
 production, *Phanerochaete chrysosporium* mycelia, fatty acyl-CoA oxidase activity, lignin biodegradation 3476.
 resistance, bacteria spores, food industry 6414.
 +thiocyanate, +lactoperoxidase, antibacterial activity, *Streptococcus agalactiae*, cystine, reduction, antagonism 3058.

Hydrogen sulfide,

bacteria, spoilage, *Gadus morhua* 3689.
 corrosion, methane composition, methanogenesis, digestion (anaerobic) 5701.
 oxidation, bioreactors, chlorobium thiosulfatophilum, computer applications, monitoring 3612.

Hydrogenase,

activity, assays, *Campylobacter fetus* subsp. jejuni 3327.
 activity, *Azospirillum brasilense*, nitrite, nitric oxide, carbon monoxide, acetylene, inhibition 8585.
 activity, butanol fermentation, carbon monoxide inhibition, *Clostridium acetobutylicum* 8646.
 activity, *Rhizobium*, *Vigna radiata*, *Vigna unguiculata* 4664.
Alcaligenes eutrophus, immobilized cells, wastewater treatment, tritiated water nuclear power plants 554.
 components, nickel, *Bradyrhizobium japonicum* 6826.
 +ferredoxin+chloroplasts, immobilization, production, hydrogen, oxygen 5161.
 immobilization, activity, *Desulfovibrio desulfuricans* 8637.
 isolation, characterization, *Rhizobium*, growth, autotrophy 3461.
 kinetics, gene manipulation, *hup* gene, *Rhizobium* 9008.
 nickel characterization, *Methanobacterium thermoautotrophicum* 8561.
 nickel, iron, characterization, *Methanobacterium thermoautotrophicum* 8560.
 purification, *Azotobacter vinelandii* 6588.
 purification, characterization, *Clostridium pasteurianum* 6839.
 purification, characterization, *Clostridium pasteurianum* 7731.
 purification, characterization, membranes localization, *Rhodospseudomonas capsulata* 2567.

Hydrogenation,

Corynebacterium equi, chalcane carbon bonds 6153.
 Hydrojuglone glucoside, relationship, anthracnose, *Gnomonia leptostyla*, disease resistance, *Juglans regia* 3855.

Hydrolase,

multienzyme complexes, isoelectric focusing, *Trichoderma reesei* 8572.
 patterns, *Penicillium* soil isolates, population dynamics 6319.

Hydrolyase,

purification, characterization, *Streptococcus faecalis* 8596.

Hydrology,

estuaries, microbial pollution, indicator species, sewage effluents 6710.

Hydrolysis,

agarose, use, immobilized enzymes, proteins immobilization 2580.
 bagasse, sugars production, *Trichoderma reesei* cellulase 1808.
 carbohydrates, fermentation criteria 3666.
 casein, elastin, *Bacillus subtilis* proteinase 921.
 cellobiose, β -D-glucosidase, *Thermoanaerobacter ethanolicus* 3493.
 cellulose, hardwoods, glucose production 5160.
 cellulose, bioreactors comparison 4441.
 cellulose, cellulase, pretreatment, zinc chloride, hydrochloric acid 3656.
 cellulose, cellulolytic enzymes, books 3386.

polyols, (continued)

- cellulose, Clostridium sporocarum, cellulase characterization 1738.
cellulose, optimization, bioreactors, Trichoderma reesei 3658.
cellulose, Trichoderma viride, cellulase, peracetic acid, sodium hydroxide, phosphoric acid, effects on 186.
enzymes, crop residues, radiation+chemicals pretreatment effects on 1044.
3- β -D-glucans, yeasts membranes, glycosylation 1883.
lactam antibiotics, β -lactamase, *Bacillus licheniformis* 4689.
celluloses, γ radiation effects on susceptibility 3654.
celluloses, Trichoderma harzianum cellulase, factors affecting 1892.
macromolecules, cellulytic microorganisms enzymes, pretreatment effects on 187.
production, *Candida cylindracea* 7769.
n-nitrophenol, enzymes purification, kinetics, *Nocardia* 7683.
oligosaccharides, α -amylase, *Thermoactinomyces vulgaris* 1777.
penicillins, cephalosporins, β -lactamase, kinetics, *Bacillus cereus* 4279.
Penicillium funiculosum β -D-glucosidase, cellulose 877.
phosphatidyl ethanolamine, *Streptococcus lactis* fractions 1895.
polysaccharides, *Streptococcus dextranase*, fungi 8679.
Solanum laciniatum glycoalkaloids, Aspergillus β -D-glucosidase 1006.
starch, inhibitors, glycoproteins, purification, characterization, α -1,4- α -D-glucosidase, Aspergillus 3500.
substrates, β -lactamase, pH, deuterium oxide effects on, kinetics, *Bacillus cereus* 4278.
5'-O-(3-thiophosphatate), inorganic pyrophosphatase, yeasts 3511.
Trichoderma, cellulose, glucose formation, kinetics mathematical models 1798.
urea, urase activity, soil 7250.
drophobic chromatography
methodology, hydrogen dehydrogenase purification, *Alcaligenes eutrophus* 5144.
drophobicity
cell surface, *Escherichia coli* injuries, antibiotics sensitivity 2241.
2,4-D, phenoxycetic acid, chlorine derivatives, biodegradation, *Pseudomonas putida* 1862.
droponica
silviculture, nutrient requirements, actinorhizas, nitrogen fixation, *Alnus incana* 8152.
droxamic acid
siderophores, incidence, soil, *Escherichia coli* bioassays 675.
droxide
free radicals, non-steroidal antiinflammatory drugs, inactivation, phage T2 4769.
- α -Hydroxy bile acids
assays, immobilized enzymes, bacteria 23.

hydroxy-benzimidazolylobamide
derivatives, *Methanococcus barkeri*, biosynthesis, isolation, characterization 3553.

hydroxy-hydroperyleneoidones
structure, Alternaria 8735.

hydroxy-1,4-naphthoquinone
purification, anthracnose, *Gnomonia leptostyla*, disease resistance, *Juglans nigra* 3855.

hydroxy-2-oxoglutarate aldolase
phosphoric acid inactivation, dimerization, *Escherichia coli* 1789.

hydroxybenzyl
nitro B1 production, effects on, Aspergillus parasiticus 3745.

hydroxybiquinolone
stimulation, proteolytic enzymes, extracellular enzymes, production, Aspergillus kangawensis, Aspergillus wentii 916.

hydroxyapatite
adhesion, *Streptococcus sanguis*, bioassays, optimization 5070.

hydroxyauramycinone
biosynthesis, *Streptomyces coeruleorubidus*, auramycinone conversion 955.
hydroxybenzoic acid
antibacterial activity, *Escherichia coli*, heat treatments 1332.
biodegradation, *Micrococcus* 3664.

- α -Hydroxybenzylbenzimidazole
inhibition, RNA biosynthesis, tobacco mosaic virus, disease control, *Nicotiana tabacum* 7216.

hydroxybutanoate
formation, ethyl 3-exobutanoate reduction, *Geotrichum candidum*, Aspergillus niger 8631.

Hydroxybutyrylguanine
antiviral activity, thymidine inhibition, herpes simplex virus 1, kinetics 460.

Hydroxybutyryl-CoA dehydrogenase
purification, ion-exchange chromatography, *Clostridium kluyveri* 8588.

Hydroxycephalosporin C
formation, cephalosporin C chemical modification, *Streptomyces clavuligerus* 3098.
antibacterial activity, *Escherichia coli*, *Staphylococcus aureus* 5728.

Hydroxycorticosterone
derivatives production, *Clostridium paraputrificum* 5197.

hydroxycoumarol(5,6-c)cinoline
stability, *Lactarius necator* 7904.

2-Hydroxyethoxymethylguanine
nucleoside inhibition, herpes simplex virus 1, DNA polymerase 4029.

antiviral activity comparison, 2'-nor-2'-deoxyguanosine, DNA polymerase inhibition, herpes simplex virus 1349.

antiviral activity, herpes simplex virus 2 9114.

antiviral activity, pseudorabies virus, herpesvirus (pigeon), bovine

microthaeis virus 6478.

antiviral activity, pseudorabies virus, macrolide antibiotics, potentiation 6475.

antiviral activity, thymidine inhibition, herpes simplex virus 1, kinetics 460.

rug resistance, herpes simplex virus 2, detection 6473.

rug sensitivity testing, herpes simplex virus, clinical isolates 2231.

rug sensitivity testing, herpes simplex virus, immunoperoxidase test, methodology 4771.

9-(2-Hydroxyethoxymethyl)guanine, (continued)

effects on DNA biosynthesis, herpes simplex virus infected BHK cells 4767.
production, 2,6-diamino-9-(2-hydroxyethoxymethyl)purine conversion, *Escherichia coli*, adenosine deaminase 902.

sensitivity relationship, herpes simplex virus 1 thymidine kinase phosphorylation 2225.

side effects, central nervous system, antiviral activity, clinical aspects, man, reviews 474.

+vidarabine, antiviral activity, DNA biosynthesis, herpes simplex virus 1 7388.

6-(1-Hydroxyethyl)-carbapenems
derivatives, antibacterial activity, structure-activity relationships 4820.

2-(1-Hydroxyethyl)-2-deavinyl chlorophyllide a
isolation, characterization, *Rhodospirillum rubrum* sphaeroides 6893.

2-Hydroxyglutamic acid
production, *Yarrowia lipolytica* 2560.

N-Hydroxyguanine
derivatives, antiviral activity 7387.

Hydroxylase
purification, characterization, microsomes, cell culture, Aspergillus ochraceus 5124.

benzo(a)pyrene, dependent, cytochrome P-448 activity, *Saccharomyces cerevisiae* 5132.

Hydroxylation

Actinomycetes, novobiocin, derivatives, chlorobiocin 5792.

2,4-dihydroxyphenylethylamine, 2,4-dihydroxyphenylalanine, monophenol monooxygenase, *Basidiomycetes* 890.

1-(hydroxyethyl)-2-1-benzoxazol-3(1H)-one
analogs, antifungal activity, *Penicillium oxalicum*, antibacterial activity, *Pseudomonas aeruginosa* 3140.

Hydroxymethylglutaryl-CoA reductase
activity, *Glycine max* cell culture, *Phytophthora megasperma* f.sp.glycinea cell walls effects on 5507.

N-(p-Hydroxyphenyl) glycine
+iodine complexes, antimicrobial activity 4033.

m-Hydroxyphenylacetic acid
Rhizoctonia solani, effects on *Glycine max*, nodulation, histopathology 1119.

16 α -Hydroxyprogesterone dehydroxylase
isolation, characterization, *Eubacterium* 4310.

Hydroxyproline
content, cell walls, Medicago sativa, association, wilt, *Verticillium albo-atrum*, *Corynebacterium michiganense* pv.indusidum 7928
levels, cell walls, *Cucumis sativus*, disease resistance, *Cladosporium cucumerinum* 7205.

2-Hydroxypyridine N-oxide
analogs, binding, inhibition protocatechuate 3,4-dioxygenase, *Pseudomonas aeruginosa* 888.

Hydroxyquinol 1,2-dioxygenase
characterization, *Trichosporon cutaneum* 6864.

16-Hydroxyoridin
Mitrothecium roridum metabolites new records 1929.

7 α -Hydroxysteroid dehydrogenase
purification, induction, chenodeoxycholic acid, deoxycholic acid, *Clostridium* absonum 4305.

7 β -Hydroxysteroid dehydrogenase
purification, induction, chenodeoxycholic acid, deoxycholic acid, *Clostridium* absonum 4305.

20 β -Hydroxysteroid dehydrogenase
crystallography, X-ray diffraction, *Streptomyces hydrogenans* 6834.

3 α -Hydroxysteroid dehydrogenase
activity, dehydrocholic acid reduction, 12-ketochenodeoxycholic acid synthesis, NADH regeneration 6990.

Aspergillus phoenicis, immobilized enzymes, androstane diene synthesis 106.
immobilized enzymes, +alkanol monooxygenase (FMN-linked) +dihydrolypoamide dehydrogenase, bioluminescence bioassays, bile acids measuring techniques 3482.

7 α -Hydroxysteroid dehydrogenase
activity, dehydrocholic acid reduction, 12-ketochenodeoxycholic acid synthesis, NADH regeneration 6990.

+alkanol monooxygenase (FMN-linked) +NAD(P)H dehydrogenase (FMN), immobilized enzymes, determination bile, serum 5131.

Hygiene

contamination, sampling, meat industry 3714.

dairy industry 5867.

milk processing, meat industry, poultry, bacteria contamination 3707.

preservation, cosmetics 7397.

standards, microorganisms contamination, minced meat 5318.

sterilization, disinfection, breweries 7547.

Hydroxycyclin B

antibiotic resistance, aminocyclitol phosphotransferase, gene mapping, plasmids, *Escherichia coli* 427.

Hymenaea

leaves resins, antifungal activity, *Pestalotia subcuticularis* 5506.

Hymenaea courbaril

plant extracts, caryophyllene epoxide, antifungal activity, fungus gardens 2221.

Hymphoxylon mammatum

stem canker, *Populus tremuloides*, virulence, pathogenesis, disease resistance 8174.

Hydodeoxycholic acid

conversion, *Pseudomonas*, anaerobic conditions, products identification 876.

Hypelcin

conformation, I.R. spectroscopy, X-ray diffraction 3140.

Hypera postica

larvae, biological control, toxicity, bioassays, exotoxins, *Bacillus thuringiensis* 8641.

Hyperparasitism

Dissoconium aciculare, biological control, powdery mildew, *Erysiphe* 8911.

Pythium oligandrum, biological control, *Rhizoctonia solani* 2079.

Teratosperma oligocladium, Sclerotinia, biological control, phytopathogenic fungi 975.

Verticillium biguttatum, Gliocladium roseum, biological control, *Rhizoctonia solani*, mycelia soil amendment, *Humicola vastatrix*, rust, *Coffea*, Malaysia 1204.

Hyper-sensitive response

Ceratocystis minor, blue stain, *Penicillium*, seasonal variations, *Pinus ponderosa* 8193.

Hypersensitive response, (continued)

- Erwinia rubrifaciens* pathogenicity, *Nicotiana tabacum* 2074.
ethylene, biosynthesis, infection, tobacco mosaic virus, tobacco necrosis virus, *Nicotiana tabacum* 2060.
ethylene biosynthesis, tobacco mosaic virus, temperature, light effects on, leaves, *Nicotiana tabacum* 2061.
Glycine max leaves, *Pseudomonas glycinea* disease resistance 319.
induction, disease control, rust 8102.
Lactuca sativa, downy mildew, *Bremia lactucae* 6304.
lignin biosynthesis, *Puccinia graminis*, f.sp. *tritici*, stem rust, *Triticum aestivum* 2059.
Nicotiana tabacum, role, *Pseudomonas solanacearum* lipopolysaccharides structure 1169.
plants, tobacco mosaic virus infection, proteins analysis 7916.
proteins, isolation, leaves, tobacco mosaic virus infection, *Nicotiana tabacum* 7199.
Puccinia hordei, rust, disease resistance, *Hordeum vulgare* 2860.
tobacco mosaic virus infection, *Nicotiana tabacum*, lignification enzymes 7193.
tobacco necrosis virus, *Nicotiana tabacum* 2057.
Vigna unguiculata leaves, *Xanthomonas campestris* pv. *oryzae* 6230.

Hypertonility,

- correlation, blood culture, growth, Enterobacteriaceae, *Staphylococcus aureus*, antibiotics 783.

Hyphae,

- Botrytisphaeria dothidea*, morphology, *Betula alba*, water stress 4614.
formation, *Glomus fasciculatum*, phosphorus effects on, *Trifolium* 8934.
fungi, *Pseudotsuga menziesii* forests 1232.
fungi, wood, staining methodology 7631.
Glomus fasciculatum, ultrastructure, roots, *Trifolium repens* 8226.
Glomus fasciculatum, ultrastructure, *Trifolium repens* roots 381.
length, measuring techniques, fungi 8985.
morphology, *Frankia*, actinorrhizas, biotyping, nodulation, *Alnus nitida* 8158.
Phytophthora megasperma f.sp. *glycinea*, α -mannans localization, host-pathogen interactions, *Glycine max* 7941.
Rhizoctonia solani, lysis, Myxobacterales, soil microorganisms, host-pathogen control, plant diseases 8920.
staining, fluorescein diacetate, soil, *Penicillium citrinum*, *Rhizoctonia solani* 8983.
vesicular-arbuscular mycorrhizas, growth, temperature 402.

Hypophoma fasciculare,

- growth, lastanox T20 effects on 8259.

Hyphomicrobium,

- growth, waste water denitrification, methanol carbon sources 1492.

- monomethyl sulfate biodegradation, industrial wastes 1016.

Hyphomycetes,

- reactors, cutting fluids biodegradation, bacteria identification 178.

Hyphomycetes,

- pathogens, biological control, *Ostrinia nubilalis* 6909.

Hypochoerous acid,

- antibacterial activity, bacteria, models, in vitro 8721.

Hypochoerium catenoides,

- biological control, *Phytophthora* root rot, *Glycine max* 5510.

Hypocotyle,

- Phaseolus vulgaris*, cell adhesion, *Colletotrichum lindemuthianum*, spores 3796.

Hyphomycetes aurantius,

- biosynthesis, ergot alkaloids, new records 3384.

Hyphothalamicity molitrix,

- aquaculture association wastewater treatment, levels, fecal coliforms,

- Streptococcus*, *Salmonella*, viruses 1463.

Hyphomycetes,

- hydrogen peroxide, bactericidal activity, cytotoxicity, *Peptostreptococcus anaerobius*, *Escherichia coli* 6445.

Hypoxanthine,

- xanthine oxidase, inhibition, milk, dairy starters 7863.

Hypoxylon atrorubens,

- pathogenicity, *Quercus* 5593.

Hypoxylon mammatum,

- toxins, effects on *Populus tremuloides*, pathogenicity 7233.

Hysterectomy,

- postoperative infection, clinical isolates, antibiotic sensitivity testing, man 9177.

I.R. Radiation,

- Cladosporium carophilum*, conidia release, disease spread, scab 272.

I.R. Spectroscopy,

- allemetric, hypelcin conformation 3140.

- hydrogen bonding, toxins, *Helminthosporium carbonum* 7911.

- identification, aroma compounds, champagne, biosynthesis, *Saccharomyces* 7813.

IBP,

- antifungal activity, spore germination, *Aspergillus nidulans* 1222.

Ica,

- nucleation, activity, pathogenicity, fruit trees, *Pseudomonas syringae* 2804.

- nucleation, activity, *Pseudomonas aeruginosa*, *Erwinia herbicola*, *Citrus sinensis*, *Citrus aurantium* 2805.

- nucleation, bacteria, frost, plants 4556.

- nucleation, bacteria, plants 3781.

Ice cream,

- production, *Lactobacillus acidophilus* use 6198.

Iceland,

- national parks, *Rhytisma salicinum* infection, *Salix* 7195.

Icterus punctatus,

- aquaculture, *Aeromonas hydrophila* population levels, culture systems 6707.

- oil flavor, absorption, odor compounds, actinomycetes, fishponds 3211.

Idioscopus clypealis,

- biological control, *Isaria* tax 7677.

- L-idurono-D-glucuronan*, structure, *Phallales* 5202.

Ilex,

- bark, nitrogen-fixing bacteria activity 8147.

Ilex pedunculosa,

- bark, nitrogen-fixing bacteria activity, atmospheric pressure, oxygen, effects on 8148.

Illicolium H,

- structure, biosynthesis, *Cylindrocycladium illicicola* 6567.

Illudoids,

- biosynthesis, *Omphalotus olivaceus*, *Clitocybe subilludens* 527.

Imazali,

- effects on *Ustilago avena* spores ultrastructure 2889.

- resistance, *Penicillium italicum*, *Penicillium digitatum*, post-harvest decay, benzimidazoles 2901.

Imidazole,

- antifungal activity, *Candida albicans* 5733.

- derivatives, antifungal activity, structure-activity relationships, reviews 6311.

- drug sensitivity testing, *Mycobacterium fortuitum* 4719.

- Trichophyton mentagrophytes* sensitivity, mycelia, arthrospores, conidia 1340.

Immunopneum,

- antibiotic resistance, *Staphylococcus aureus* 4708.

- antibiotic synergy, cotrimoxazole, cefotaxime, *Nocardia asteroides* 480.

- inhibition, *Proteus vulgaris*, β -lactamase 2317.

Immobilization,

- agar, carrageenans, gelatin, immobilized cells, tyrosine phenol-lyase activity, *Citrobacter freundii* 7656.

- agarose, + *Lens culinaris* agglutinins, use, preparation, pseudorabies virus vaccines 3182.

- Aspergillus niger* mycelia glucose oxidase, catalase 1739.

- Bacillus subtilis* proteinase, activity, cellulose supports 5999.

- biomass support particles, fermentation, bioreactors, yeasts 4219.

- biotechnology, immobilized cells, organelles immobilization 5101.

- cells, organelles, utilization, books 9341.

- chloroplasts + ferredoxin + hydrogenase, production, hydrogen, oxygen 5161.

- α -chymotrypsin + catalase, methodology 4304.

- chymotrypsin 6837.

- Claviceps purpurea, methodology, production, ergot alkaloids 969.

- cyclomaltodextrin glucanotransferase, characterization, *Bacillus* 5191.

- effects on activity, stability, glucose oxidase, *Penicillium vitale*, β -D-fructofuranosidase, *Saccharomyces cerevisiae* 7743.

- enzymes, books 3375.

- enzymes, methodology, reviews 6032.

- Escherichia coli*, use, penicillin amidase, polymers substrates 778.

- β -D-fructofuranosidase, coupling, *Zea mays* crop residues 8551.

- β -D-fructofuranosidase, yeasts 4333.

- fungi mycelia, utilization, reviews 8486.

- β -D-galactosidase, β -D-glucosidase, exo-1,4- α -D-glucosidase, use, textiles, hydrophobicity 5142.

- glucose oxidase, methodology 4300.

- heparin lyase, *Flavobacterium* 6865.

- hydrogenase, activity, *Desulfovibrio desulfuricans* 6837.

- lactate oxidase, lactic acid bioassays, *Acetobacter peroxidans* 3447.

- lactate 2-monooxygenase, use serum L-lactic acid analysis 7748.

- methodology, *Citrobacter freundii* 5077.

- methodology, immobilized enzymes, gels 3513.

- methodology, immobilized enzymes, supports penetration, mathematical models 8.

- milk-clotting enzymes, methodology, *Russula decolorans* 4317.

- neutral proteinase, *Bacillus thermoproteolyticus*, activity, thermal stability, radiation polymerization 1759.

- organelles, biotechnology, reviews 4976.

- organelles, books 4232.

- penicillin amidase, *Escherichia coli* 3512.

- polycarylamide, *Escherichia coli*, *Pseudomonas putida*, effects on morphology, biosynthesis 1614.

- radiation polymerization, glucose isomerase activity, *Streptomyces phaeochromogenes* 5178.

- Rhizopus* exo-1,4- α -D-glucosidase, use, poly(tetrafluoroethylene) membranes - Coulomb force 39.

- Saccharomyces formosensis*, growth, ethanol production 1866.

- Streptomyces phaeochromogenes*, radiation polymerization, glucose phosphatase isomerase activity 6027.

- substrates, alginate, gel diffusion 4142.

- substrates, invertase 3507.

- subunit, aluminum oxide, *Bacillus subtilis* 7734.

- tetrahydrofolate dehydrogenase, use 5,6,7,8-tetrahydrofolate preparation 8575.

- trypsin like enzymes, *Streptomyces* 7689.

- xylose isomerase, methodology, *Streptomyces olivocinereus* 5170.

- yeasts, methodology 812.

- yeasts, use, beer fermentation 8670.

- yeasts, zeta potential 4221.

Immobilized cells,

- Alcaligenes eutrophus, hydrogenase, wastewater treatment, irradiated water, nuclear power plants 554.

- Aspergillus terreus*, itaconic acid production 862.

- bacteria, methanogenesis, waste water, reactors 419.

- bacteria, polymers supports 763.

- biomass production, fermenters 3402.

- bioreactors, ethanol production, *Zymomonas mobilis* 3618.

- biotechnology 5101.

- biotechnology, reviews, microorganisms 4976.

- Brevibacterium flavum*, fumarate hydratase activity 75.

- Brevibacterium flavum*, fumarate hydratase activity stability 3443.

- cadmium bioaccumulation, *Citrobacter* 5690.

- Caldwellia acidophila*, enzymes, thermal stability, ultrafiltration membranes 764.

- carbohydrates transformation 2724.

- carrageenans, glucose fermentation, ethanol production, *Zymomonas mobilis* 3618.

- carrageenans supports, penicillin G biosynthesis, nutrient concentrations, *Penicillium chrysogenum* 4048.

- catalysis, organic compounds conversion 1003.

- cellulase production, *Trichoderma reesei* 3466.

- cellulase production, *Trichoderma reesei* 6021.

- characterization, microorganisms 3379.

- citric acid production, *Saccharomyces lipolytica* 2554.

- Clostridium butyricum, methane, production, wastewater treatment 1468.

- Clostridium thermoaceticum, acetic acid production 4270.

- Corynebacterium fascians, nomilin conversion obacoune, bitter principle re fruit juices, *Citrus* 7773.

- crop residues fermentation, ethanol production, *Saccharomyces* 3641.

immobilized cells, (continued)

rose-flow bioreactors, silica supports, ethanol fermentation, *Saccharomyces cerevisiae* 3605.
Sarullaria lunata, hydrocarbon production 107.
 survival oxygen effects on nitrogen fixation, *Azotobacter vinelandii* 3550.
Stomycorhizas, inoculum efficacy, trees 8163.
 lectrodes, asparaginase detection, *Serratia marcescens* 6777.
 lectrodes, waste water, chemical analysis 768.
Saccharichia coli, *Pseudomonas daucinae*, ammonium fumarate conversion, L-alanine
Saccharichia coli, tryptophan synthase, L-tryptophan production 6.
Saccharichia coli, 7-aminodesacetoxy-cephalosporonic acid production 506.
 ethanol fermentation, *Kluyveromyces fragi* 2689.
 ethanol production, batch culture, yeasts 3619.
 ethanol production, bioreactors 3634.
 ethanol production, fermentation optimization, sodium azide effects on electron
 transport cytochrome c oxidase, *Saccharomyces cerevisiae* 3624.
 ethanol production, *Saccharomyces formosensis* 5291.
 ethanol production, water effects on, *Saccharomyces cerevisiae* 3659.
 ethanol production, yeasts 3639.
 fermenters, ethanol fermentation, mathematical models 156.
 flavor compounds production, 2,3-butanedione, acetoin, dairy industry,
Streptococcus lactis subsp. *diacetylactis* 6992.
 gel diffusion, immobilization substrates, alginate acid 4142.
 glucanobacter suboxydants, D-arabitol conversion, D-xylulose production 949.
 glucose fermentation, ethanol production, fermenters, *Saccharomyces cerevisiae*
 5065.
 D-glucosidase activity, role cellulose biodegradation, *Alcaligenes faecalis*
 5190.
Jansecula polymorpha, methanol, oxidation, kinetics 997.
 hydrocarbon supersaturation, 3-oxosteroide Δ^1 -dehydrogenase activity,
Arthrobacter simplex 3523.
 hydrogen production, molasses conversion, *Clostridium butyricum* 3577.
 hydrogen production, *Rhodospseudomonas* 3559.
 immobilization methodology, *Citrobacter freundii* 5077.
 immobilized enzymes, conversion, water insoluble organic compounds, lipophilic
 organic compounds 141.
 immobilized enzymes, fermentation 3499.
 immobilized enzymes, *Saccharomyces cerevisiae* + β -D-glucosidase, cellobiose
 conversion, ethanol production 8684.
 isotropic gelation formation catalysts 4373.
Kluyveromyces fragilis, ethanol, fermentation, whey 2684.
Kluyveromyces marianus, *Helianthus tuberosus* fermentation, ethanol production
 3640.
Kluyveromyces marianus, *Saccharomyces cerevisiae*, whey, lactose fermentation,
 ethanol production 1861.
 lactobacilli delbrueckii, *Lactobacillus bulgaricus*, lactic acid, fermentation 8.
Leuconostoc oenos, malolactic fermentation, wine 165.
 imonin levels, fruit juices, bitterness reduction, *Arthrobacter globiformis*
 5338.
 malolactic fermentation, *Leuconostoc oenos* 6931.
 methanogenesis, animal wastes, methanogenic bacteria 4124.
 methanogenesis, supports, inhibition, hydrogen, ethane, methane, methanogenic
 bacteria 7304.
 methanogenesis, waste treatment, digestion (anaerobic), manure, chickens 7518.
 methanogenic bacteria, methane, mixed culture, methanogenesis, sucrose
 conversion 2162.
Methylophaga rubra, coal, methane oxidation 1300.
 microorganisms, books 4232.
 microorganisms, mathematical models, diffusion, factors affecting 1528.
 molasses fermentation, ethanol production, *Saccharomyces cerevisiae* 8659.
 Nocardia, androst-4-ene dione conversion, methyl-perhydroandrostane biosynthesis
 105.
 nitrifying bacteria, + creatinine deiminase immobilized enzymes, electrodes,
 creatinine determination 1605.
 Nitrosomonas, Nitrobacter, *Methylophaga flagellata*, electrodes, methane, ammonia,
 nitrogen dioxide 767.
 Nocardia corallina, propylene oxide production 418.
 organic acids production, fermentation rates, supports effects on, *Kluyvera*
 noncitrifolia 5301.
 penicillin fermentation, dissolved oxygen, aeration, fermenters, *Penicillium*
 chrysogenum 7435.
 penicillin urticae, patulin production, nitrogen sources 2757.
 penicillium urticae, proteins contents, methodology 5931.
 pigments production, food dyes, *Monascus* 5238.
 protein biosynthesis bioreactors, *Escherichia coli* 2.
 pseudomonas, phenylalanine, conversion, tyrosine 875.
 radiation polymerization, antibodies adsorption, *Escherichia coli* 5896.
 radiation polymerization, cellulase hydrolysis, sawdust, *Trichoderma reesei* 6949.
 views 5102.
 reviews, bioreactors 8577.
 views, industries, China, People's Rep. 77.
 Rhizopus thailandensis, bioreactors, exo-1,4- α -D-glucosidase, production,
 mathematical models 7729.
 rhamycin oxide activity, *Hemicella* 5083.
 rhamycin production, *Hemicella* 4054.
 Saccharomyces cerevisiae, *Arthrobacter globiformis*, steroids conversion 104.
 Saccharomyces cerevisiae, molasses fermentation, ethanol production 167.
 Saccharomyces formosensis, molasses fermentation, ethanol production 168.
 Saccharomyces uvarum, ethanol, production, fermentation, juices, *Sorghum bicolor*
 8658.
 solvents production, reviews 3575.
 spores, progesterone hydroxylation, *Aspergillus ochraceus* 6048.
 steroids production, sterols conversion, *Mycobacterium phlei* 4357.
 steroids production, use solvents, *Nocardia rhodochrous* 3525.
 Streptomyces phaeochromogenes, comparison, glucose isomerase, immobilized
 enzymes, D-glucose, isomerization, bioreactors, characterization 7746.
 sucrose fermentation, ethanol production, monitoring, computer applications,
 Saccharomyces cerevisiae 6143.
 sugars fermentation, ethanol production, *Saccharomyces cerevisiae* 6130.
 thermophilic rubens sp.nov., fumarate hydratase, fumaric acid conversion, L-malic acid
 8.
 thiamycin production, *Streptomyces cattleya* 518.
 thiamycin production, *Streptomyces cattleya* 5805.
 tyrosine phenol-lyase activity, immobilization, agar, carrageenans, gelatin,
Citrobacter freundii 7656.

immobilized cells, (continued)

use, fermentation, books 2539.
 use, peptide antibiotics, biosynthesis, production, reviews 1410.
 viability, microorganisms 4971.
 xylose isomerase, penicillin acylase, activity, *Escherichia coli*, *Streptomyces*
 roseofulvus 71.
 yeasts, *Aspergillus niger*, use production industries chemicals 6836.
 yeasts, bioreactors, ethanol fermentation, feeds contamination molasses 6123.
 yeasts, continuous culture, ethanol, production, microorganisms, contamination,
 molasses 7759.
 Zymomonas mobilis, calcium + algin, ethanol production 2675.
 Zymomonas mobilis, interaction, β -D-glucosidase immobilized enzymes 18.
 Zymomonas mobilis, *Saccharomyces cerevisiae*, *Kluyveromyces fragilis*, ethanol,
 fermentation 166.

Immobilized enzymes.

acetate kinase, NAD⁺ kinase, NADP production, ATP recycling 143.
 alcohol dehydrogenase, stability, yeasts 4351.
 alcohol dehydrogenase, yeasts 1768.
 alkaline phosphatase, methodology 3467.
 alkanal monooxygenase (FMN-linked) + dihydrodipropamide
 dehydrogenase + 3 α -hydroxysteroid dehydrogenase, bioluminescence bioassays,
 bile acids measuring techniques 3482.
 α -amylase inactivation, *Bacillus subtilis*, factors affecting 881.
 α -amylase, kinetics, *Bacillus subtilis* 1772.
 α -amylase, reactivation, *Bacillus subtilis* 4301.
 asparaginase, *Escherichia coli*, blood immobilization, bioreactors 2575.
Aspergillus niger glucose oxidase + *Saccharomyces cerevisiae*
 β -D-fructofuranosidase, activity, stability 1770.
 bacteria, 12- α -hydroxy bile acids assays 23.
 bacterial luciferase, bioassays, ATP, levels 8564.
 biotechnology 5125.
 books 1684.
 books 3375.
 books, conferences 850.
 calorimetry, use bioreactors 4312.
 carboxypeptidase Y, peptide synthesis applications, yeasts 63.
 catalysis efficacy optimization 8553.
 catalysts inactivation kinetics 5194.
 + catalysts, kinetics 5195.
 cellulolytic enzymes, hemocellulase, *Macrophomina phaseolina* 8571.
 chymosin, mucor, milk curdling 205.
 α -chymotrypsin + catalase, immobilization methodology 4304.
 α -chymotrypsin, penicillin amidase, matrix conformation effects on activity
 1769.
 clinical microbiology, bioassays 88.
 creatinase, creatinase, sarcosine oxidase, electrodes, creatine, creatinine 69.
 creatinine deiminase + nitrifying bacteria immobilized cells, electrodes,
 creatinine determination 1605.
 cyclomaltodextrin glucanotransferase, characterization, *Bacillus* 5191.
 dextranase, use, dextranase purification, mutants, *Leuconostoc mesenteroides*
 5147.
 endo-D-galacturonanase, kinetics, *Aspergillus* 15.
 enzymes ratio 4335.
Escherichia coli β -D-galactosidase, lactose hydrolysis, milk 8542.
 exo-1,4- α -D-glucosidase, kinetics, *Aspergillus niger* 1771.
 exo-1,4- α -D-glucosidase, kinetics, stability, *Aspergillus niger* 78.
 exo-1,4- α -D-glucosidase, pullulanase, xylose isomerase, starch processing,
Aspergillus niger, *Klebsiella aerogenes*, *Bacillus coagulans* 111.
 exo-1,4- α -D-glucosidase, *Rhizopus niveus*, maltose, starch hydrolysis,
 reactors 112.
 food industry, reviews 5139.
 β -D-fructofuranosidase, coupling, *Zea mays* crop residues 8551.
 β -D-fructofuranosidase, immobilization, yeasts 4333.
 β -D-galactosidase, aminocyclase, stability, kinetics, *Aspergillus oryzae* 80.
 β -D-galactosidase, *Aspergillus niger* 69.
 β -D-galactosidase, *Aspergillus niger*, fluidized beds 82.
 β -D-galactosidase, *Aspergillus niger*, membranes, bioreactors 83.
 β -D-galactosidase, *Aspergillus oryzae*, lactose hydrolysis, skim milk, whey
 206.
 β -D-galactosidase, use cellulose beads, *Escherichia coli* 72.
 gels, immobilization methodology 3513.
 glucose isomerase, comparison, *Streptomyces phaeochromogenes*, immobilized cells,
 D-glucose, isomerization, bioreactors, characterization 7746.
 glucose isomerase, reactors, mass transfer, mathematical models, *Streptomyces*
 5168.
 glucose oxidase, bioreactors optimization 7735.
 glucose oxidase, immobilization methodology 4300.
 glucose oxidation, glucose oxidase, *Aspergillus niger*, catalase, liver, cattle
 2578.
 β -D-glucosidase, characterization 3491.
 β -D-glucosidase, endo-1,3- β -D-xylanase, polymers solubility, *Penicillium*
 funiculosum 5134.
 β -D-glucosidase, interaction, *Zymomonas mobilis* immobilized cells 18.
 glutamate dehydrogenase, characterization, *Aspergillus ochraceus* 92.
 hydrogen effects on kinetics 4356.
 7 α -hydroxysteroid dehydrogenase + alkanal monooxygenase (FMN-linked) + NAD(P)H
 dehydrogenase (FMN), determination bile, serum 5131.
 3 α -hydroxysteroid dehydrogenase, androstane dione synthesis, *Aspergillus*
 phoenicis 106.
 immobilization effects on activity, stability, glucose oxidase, *Penicillium*
 vitale, β -D-fructofuranosidase, *Saccharomyces cerevisiae* 7743.
 immobilization methodology, reviews 6032.
 immobilization methodology, supports penetration, mathematical models 8550.
 + immobilized cells, fermentation 3499.
 + immobilized cells, *Saccharomyces cerevisiae* + β -D-glucosidase, cellobiose
 conversion, ethanol production 8684.
 immobilized cells, water insoluble organic compounds, lipophilic organic
 compounds 141.
 immobilized cells, yeasts, *Aspergillus niger*, use production industries chemicals
 6836.
 inulinase, inulin hydrolysis, fructose production, *Kluyveromyces fragilis* 8548.
 invertase immobilization substrates 3507.
 methodology 5127.
 methodology, characterization, fermentation applications, mycelia *Aspergillus*
niger, *Saccharomyces cerevisiae* 4408.
 microorganisms, glucose isomerization, sweeteners production, starch, *Zea mays*

Immobilized enzymes, (continued)

1518.
microorganisms, use, catalysis, chemicals, production, reviews 6031.
milk-clotting enzymes, immobilization methodology, *Russula decolorans* 4317.
neuraminidase, use agarose, hydrolysis, *Arthrobacter* 2580.
penicillin acylase, affinity adsorption 8581.
penicillin amidase, diethyleneglycol, diethylenetriol stabilization 74.
production, penicillins, cephalosporins, penicillin amidase 4045.
proteinase, albumin hydrolysis, *Aspergillus awamori* 4341.
proteinase, proteins hydrolysis, mathematical models, crop residues, bioreactors, Penicillium dupontii 3475.
reviews 56.
reviews, bioreactors 8577.
reviews, industries, China, People's Rep. 77.
starch hydrolysis, mag-1, 4- α -D-glucosidase 3535.
 β -(sulfatoethylsulfonfyl) aniline cross-linkage 81.
synthesis, peptide antibiotics 4795.
systems, fungi, corn syrup production 208.
triacylglycerol lipase, fats esterification, *Rhizopus delemar* 67.
Trichoderma viride lysine 2-monooxygenase, electrodes, use, assays, L-lysine, fermenters 38.
urase, immobilization methodology 4313.
urase, methodology 3468.
use β -lactam antibiotics synthesis 4796.
use, peptide antibiotics, biosynthesis, production, reviews 1410.
xylose isomerase, glucose isomerization, high-fructose corn syrup production 145.
xylose isomerase immobilization methodology, *Streptomyces olivocinereus* 5170.
xylose isomerase, kinetics, *Streptomyces phaeochromogenes* 70.
- Immune adherence,**
immunossays, etiology, viruses, hemorrhagic fever, association, nephrotic syndrome 3251.
- Immune response,**
viruses antigens, vaccines development association, man 3178.
- Immune serum globulin,**
production, industrial applications, bacteria, viruses 9218.
- Immune status,**
breast milk heat treatments, microorganisms contamination, nutritional status, infants, man 7038.
rubella, determination methodology, man 1569.
rubella virus, characterization, latex agglutination, man, methodology 635.
rubella virus infection, diagnosis, hemolysis immunossays 600.
- Immunity,**
avian laryngotracheitis virus, live vaccines, infectivity, chickens 3180.
detection, Newcastle disease, enzyme-linked immunosorbent assay, chickens 3244.
measles virus, detection, enzyme-linked immunosorbent assay, man 4168.
tetanus, enzyme immunossay, detection, man, methodology 8461.
vaccines, African swine fever virus antigens, detergents solubilization, pigs 1452.
varicella-zoster virus, man, characterization, fluorescent antibody test, comparison, enzyme-linked immunosorbent assay 636.
- Immunity (cell-mediated),**
cytomegalovirus (human) envelopes antigens, vaccines, guinea-pigs 4072.
- Immunity (humoral),**
cytomegalovirus (human) envelopes antigens, vaccines, guinea-pigs 4072.
- Immunitization (passive),**
hepatitis A virus immunoglobulins standardization 6618.
- Immunoassays,**
agglutins staining, dairy products, *Streptococcus lactis* 3718.
clinical microbiology, reviews 585.
detection, Chlamydia trachomatis membrane proteins 753.
detection, *Erwinia amylovora*, plant diseases 3441.
detection, *Mycoplasma pulmonis* antibodies 5021.
diagnosis, adenovirus (human) infection, nasopharynx secretions, feces, children 3238.
Escherichia coli, lipopolysaccharides characterization 6058.
fluorescence polarization, comparison, radioimmunoassay, serum levels, vancomycin, man 3116.
hemolysis, rubella virus infection diagnosis, man, immune status 600.
immune adherence, etiology, viruses, hemorrhagic fever, association, nephrotic syndrome 3251.
immunodiagnosis, Legionella infection, man 9291.
immunofluorescence, detection, rubella virus, antibodies, methodology 637.
immunoglobulin M, use, diagnosis, La Crosse virus infection, man 3237.
methodology, parvovirus detection, man 4157.
methodology, retrovirus (murine), retrovirus (feline), quantification, cell culture monoclonals 6749.
monoclonal antibodies, SV40, antigen T binding sites, DNA 589.
protein A, serotyping, herpes simplex virus clinical isolates 595.
Rotavirus, comparison, electron microscopy, detection, rotavirus (human), feces 3239.
serum netilmicin 530.
solid-phase methods, rotavirus (human) antigens detection, feces, children 4169.
spin probes plasma membranes, detection, *Neisseria meningitidis* antibodies 3325.
varicella-zoster virus antigens, skin tests 8447.
- Immunochemistry,**
methodology, detection, localization, barley stripe mosaic virus, Triticum aestivum infected cells 4522.
- Immunocompromised hosts,**
infection prophylaxis, laminar air flow, nosocomial environments 570.
- Immunodiffusion,**
assays, nitrate reductase, sirohaem containing proteins, *Escherichia coli* 8559.
Coccidioides immitis antibodies detection methodology 1674.
Coccidioides immitis antibodies quantitation, comparison complement fixation 815.
comparison, radioimmunoassay, bovine leukemia virus antibodies detection 3256.
detection, bromine mosaic virus, seed-borne diseases, transmission (seed), seeds, Triticum aestivum 8787.
detection, cucumber mosaic virus, Nicotiana tabacum, sap 8822.
identification, *Corynebacterium sepeidonicum*, ring rot, diagnosis, Solanum tuberosum 8466.
identification, *Sporothrix schenckii*, *Ceratomyces minor*, *Graphium penicilloides* 806.
relationship, *Paracoccidioides brasiliensis* antigens, production methodology

Immunodiffusion, (continued)

4228.
standardization, influenza virus hemagglutinins 4993.
- Immunoelectrofocusing,**
staining, identification, subacute sclerosing panencephalitis virus, immunoglobulin G, methodology 638.
- Immunoelectron microscopy,**
comparison, enzyme-linked immunosorbent assay, electron microscopy, use, detection, rotavirus (human), feces 3236.
coupling factor 1 subunits stoichiometry, use monoclonal antibodies, *Escherichia coli* 3479.
localization, rabies virus, antigens, central nervous system, embedding, methodology 4999.
magnetic fields, viruses, grids, rotation, effects on 9273.
methodology, detection, feces, viruses, association, gastroenteritis, neonates, man 3252.
methodology, plant viruses detection, gold+immunoglobulin G complexes 8439.
methodology, Sindbis virus detection, tissue culture 8443.
rotavirus detection, enzyme immunoassay comparison 611.
rotavirus serotyping 4986.
solid phase methods, BK virus, papovavirus, cell culture 599.
supports, effects on, poliovirus, detection 5881.
tobamovirus, concentration, methodology 651.
- Immunoelectrophoresis,**
Streptococcus identification 1649.
- Immunofluorescence,**
anti complement, use, detection, varicella-zoster virus antibodies, serum, man 1566.
Chlamydia trachomatis antibodies, respiratory tract diseases, man 4196.
comparison, monoclonal antibodies, 2-bromovinyl-2'-deoxyuridine, sensitivity, serotyping, herpes simplex virus, methodology 655.
diagnosis, *Erwinia amylovora*, plant diseases 2773.
enumeration, *Rhizobium japonicum*, *Rhizobium leguminosarum*, rhizosphere, nodulation, competition, *Pisum sativum*, Glycine max 2967.
herpes simplex virus antigens detection, comparison immunoperoxidase test 1.
immunossays, detection, rubella virus, antibodies, methodology 637.
influenza virus, identification, tissue culture, models 610.
microscopy, antisera, *Corynebacterium sepeidonicum*, cross-reactivity, soil microorganisms, association, Solanum tuberosum 7186.
microscopy, *Phaeolus schweinitzii*, propagules, identification, detection, soil 4621.
monoclonal antibodies, sensitivity, Chlamydia trachomatis inclusions detection, man 2455.
respiratory syncytial virus, clinical isolates, detection 613.
oil, persistence, *Bacillus thuringiensis* 3580.
solid phase methods, Legionella pneumophila antibodies detection 1656.
solid phase methods, monoclonal antibodies selection, adenovirus specificity 5885.
Streptococcus group B, clinical isolates, detection, identification 2477.
use, potassium thiocyanate, staining, removal, measles virus infected cells 153.
- Immunogenicity,**
adjuvants, major histocompatibility complex purification, vaccines 6589.
antigenic determinants, synthetic proteins, vaccines production, herpes simplex virus 6639.
Bacteroides nodosus pili vaccines, sheep 3185.
combined vaccines, *Corynebacterium diptheriae* toxoids, Haemophilus influenzae polysaccharides, rabbits 6655.
hemagglutinins, expression, cloning vectors, vaccines production, influenza virus 6636.
hepatitis B virus, micelles proteins, vaccines, Pan troglodytes 6642.
hepatitis B virus vaccines 6600.
hepatitis B virus vaccines 6652.
influenza virus envelopes proteins, isolation, vaccines production, mice 6620.
Leptospira vaccines, pigs 4893.
membrane proteins, liposomes, incorporation, influenza virus, rubella virus, vaccines, rabbits 6650.
Neisseria gonorrhoeae, *Neisseria meningitidis*, pili, vaccines, production 538.
penicillins, isolation, influenza virus 1704.
Pseudomonas aeruginosa, toxoids, production, genetic analysis 540.
Pseudomonas aeruginosa vaccines development, mice 6663.
rabies virus, association vaccines 1451.
rabies virus strains vaccines production, *Vulpes vulpes* 6629.
Rickettsia rickettsii Rocky Mountain spotted fever vaccines, efficacy 2326.
rotavirus (bovine) vaccines, animal models 3177.
Salmonella typhimurium vaccines, β -propiolactone inactivation, mice 2324.
Salmonella vaccines, antigen O 2322.
synthetic antigens vaccines, production, influenza virus 6601.
synthetic hepatitis B surface antigen-fatty acids conjugate, use vaccines, animal models 4071.
synthetic peptides, DNA recombination, vaccines production, hepatitis B virus 6615.
synthetic peptides, vaccines production, hepatitis B surface antigen 6609.
toxoids, methodology purification methodology 4891.
toxoids purification, *Corynebacterium diptheriae* 4892.
vaccines, bacteria polysaccharides capsules, reviews, man 3184.
vaccines, polysaccharides proteins conjugate, preparation, gram-negative bacteria 3233.
vaccines, production, Haemophilus influenzae antigens isolation, cattle 4895.
vaccines, production, hemagglutinins purification, Bordetella pertussis 8389.
- Immunoglobulin A,**
antibodies, Epstein-Barr virus, autoradiography, immunodiagnosis, nasopharyngeal carcinoma, man 4992.
Francisella tularensis, detection, enzyme-linked immunosorbent assay method 2468.
proteinase production, methodology, pathogenicity, clinical isolates, bacteria 1575.
- Immunoglobulin G,**
adenovirus (avian), detection, enzyme-linked immunosorbent assay, identification 4014.
antibody response, BK virus, serum levels, radioimmunoassay, methodology 2438.
antibody response, coxsackievirus B, specificity, enzyme-linked immunosorbent assay 2438.
antisera, v-mos gene proteins, inhibition transformation, vaccines models, Moloney sarcoma virus 6648.
cerebrospinal fluid, measurement, enzyme-linked immunosorbent assay method.
Mycobacterium tuberculosis meningitis, methodology 7590.

immunoglobulin G, (continued)

Chlamydia, detection, enzyme-linked immunosorbent assay 760.
 Chlamydia trachomatis, specificity, detection, immunoperoxidase test 2476.
 cytomegalovirus, quantification, enzyme-linked immunosorbent assay methodology, man 649.
 detection, enzyme-linked immunosorbent assay, Mycobacterium tuberculosis, proteins, cerebrospinal fluid, meningitis, man 6773.
 detection, measles virus hemagglutinins, enzyme immunoassay methodology 8442.
 enzyme-linked immunosorbent assay, immunodiagnosis, Q fever, man 2496.
 rubeola virus, detection, enzyme-linked immunosorbent assay methodology, man 2468.
 gold complexes, immunoelectron microscopy methodology, plant viruses detection 8439.
 Japanese encephalitis virus, enzyme-linked immunosorbent assay 5011.
 bacterium paratuberculosis reactivity, detection, enzyme-linked immunosorbent assay 3324.
 cytivirus (human), serum levels, enzyme-linked immunosorbent assay, statistical analysis, man 4166.
 Salmonella minnesota, enzyme-linked immunosorbent assay, rabbits 2459.
 Streptococcus pneumoniae capsules polysaccharides, enzyme-linked immunosorbent assay 1622.
 subacute sclerosing panencephalitis virus, identification, staining, immunoelectrofocusing, methodology 638.
 tick-borne encephalitis virus, enzyme-linked immunosorbent assay standardization, serum levels, man 2447.
 vanella-zoster virus, radioimmunoassay, methodology 5009.
immunoglobulin M,
 detection, tick-borne encephalitis virus, detection, indirect fluorescent antibody test, 2-mercaptoethanol, man 7557.
 antibody response, BK virus, serum levels, radioimmunoassay, methodology 9279.
 association, antibodies, hepatitis B core antigen, measurement, radioimmunoassay, methodology 7565.
 Chlamydia, detection, enzyme-linked immunosorbent assay 760.
 cytomegalovirus (human) diagnosis, enzyme-linked immunosorbent assay, man 6742.
 detection, enzyme-linked immunosorbent assay methodology, Treponema phagedenis flagella, syphilis, rabbits 765.
 detection, hepatitis A, enzyme-linked immunosorbent assay, man 4156.
 detection, rubella virus specificity, enzyme-linked immunosorbent assay methodology 8446.
 detection, serum, immunodiagnosis, Japanese encephalitis virus, radioimmunoassay 593.
 Epstein-Barr virus, detection, use, enzyme immunoassay 1568.
 Francisella tularensis, detection, enzyme-linked immunosorbent assay methodology, man 2468.
 hepatitis B core antigen, enzyme-linked immunosorbent assay methodology, man 6738.
 heterophil antibody, infectious mononucleosis, Epstein-Barr virus, immunodiagnosis, enzyme-linked immunosorbent assay 603.
 immunoassays, use, diagnosis, La Crosse virus infection, man 3237.
 Japanese encephalitis virus, enzyme-linked immunosorbent assay 5011.
 measles virus, rubella virus, detection, monoclonal antibodies use, immunoassay, man 644.
 rubella virus, detection methodology, pregnancy, man 5878.
 rubella virus, serum levels, enzyme-linked immunosorbent assay, man 618.
 rubella virus specificity, serum ultrafiltration, man 591.
 Streptococcus pneumoniae capsules polysaccharides, enzyme-linked immunosorbent assay 1622.
 tick-borne encephalitis virus, enzyme-linked immunosorbent assay standardization, serum levels, man 2447.
immunoglobulins,
 Francisella tularensis, detection, enzyme-linked immunosorbent assay methodology, man 2468.
 hepatitis A virus, standardization, immunization (passive) 6618.
immunoperoxidase,
 plaque assay, methodology, Africa swine fever virus antibodies detection 634.
immunoperoxidase antiglobulin test,
 titration, mumps virus infectivity 1553.
immunoperoxidase test,
 bacteriostats, sodium azide, effects on 3052.
 detection, Chlamydia trachomatis immunoglobulin G specificity 2476.
 drug sensitivity testing, 9-(2-hydroxyethoxymethyl)guanine, herpes simplex virus, methodology 4771.
 herpes simplex virus antigens detection, comparison immunofluorescence 1549.
 herpes simplex virus, detection, identification 825.
 labelling, Azospirillum brasilense, rhizoplane, Pennisetum americanum 1275.
 localization, Leptospira, tissue culture 4181.
 methodology, detection, rotavirus, adenovirus, cell culture 6734.
 neutralization, detection, antibodies, hog cholera virus, bovine diarrhoea-mucosal disease virus, pigs 6743.
 paratuberculosis diagnosis 3323.
 staining, + fibroblasts cell culture, herpes simplex virus detection 5002.
 use, detection, respiratory syncytial virus, nasopharynx secretions, man 3234.
spring viremia of carp virus antigens detection, organs, Cyprinus carpio 5888.
immunoprecipitation,
 electrophoresis, methodology, respiratory syncytial virus, antibodies, specificity 7565.
 Epstein-Barr virus, antigens, methodology 647.
 identification, respiratory syncytial virus, proteins, methodology 645.
 Streptococcus group B identification, carbohydrates monoclonal antibodies analysis 1629.
P,
 bioassay, antibiotics stimulation, Brevibacterium ammoniagenes 115.
 bioassay, antibiotics stimulation, Brevibacterium ammoniagenes 952.
 excretion, membrane permeability mutants, Brevibacterium ammoniagenes 7765.
 production, Tween stimulation, Brevibacterium ammoniagenes 4371.
perates,
 plant diseases, Gibberella imperatae sp.nov., characterization 7950.
perfect state,
 Azospirillum drummondii sp.nov., Phlox drummondii leafspot etiology, Pleospora drummondii sp.nov. 2039.
plusion bodies,
 potyvirus, leaves, tissues, variability 8255.
 ultrastructure, hexadecane metabolism, Arthrobacter 5705.

Inclusions,

Chlamydia trachomatis, cells, detection, monoclonal antibodies, labelling methodology 3337.
Incubation,
 anaerobic conditions, detection, Streptococcus pneumoniae, respiratory tract 5908.
 temperature, role, Campylobacter fetus subsp. jejuni isolation, man feces 1648.
 time, Haemophilus equigenitalis isolation, contagious equine metritis, horses 7573.
Indarbela quadrinata,
 larvae, biological control, Beauveria bassiana 6081.
Indica,
 Acroporus powdery mildew, Ipomoea fistulosa, new records 2038.
 Alternaria alternata leafspot, Cassia angustifolia, Cassia acutifolia, new records 2040.
 animal isolates, Salmonella drug resistance 3042.
 apples, incidence, penicillin acid 7090.
 Areca catechu nuts, incidence, patulin 7087.
 Catharanthus roseus, leafspot, Alternaria alternata 8049.
 Cicer arietinum, Ascochyta blight 3792.
 epidemiology, Colletotrichum lagenarium, anthracnose, Lagerania sicaria 8830.
 fermented milk products, lactic acid bacteria 4447.
 fermented milk products, Streptococcus lactis subsp. diacetylactis 4453.
 incidence, aflatoxins, food contamination, coconuts, products 7894.
 incidence, downy mildew, Pseudoperonospora cubensis, ospores, Lagerania sicaria, Cucurbita moschata 8838.
 Linum usitatissimum disease resistance, Melampora lini rest 3875.
 man, food, animals feeds, detection aflatoxins 7051.
 Phoma sorghina leafspot incidence, Grewia asiatica 2034.
 phytopathogenic fungi diseases, conferences 2547.
 phytopathogenic fungi, ecological distribution, host range, new records 1963.
 rust fungi, host range 2036.
 Sorosporium apparatus sp.nov. smut, Kyllinga triops 2035.
 Staphylococcus contamination, dairy products, public health 1056.
Indicator species,
 Bacillus stearothermophilus, quality control, steam sterilization efficacy 476.
 bacteria, comparison, enterovirus microbial pollution, swimming pools, Romania 2409.
 bacteria, pollution monitoring, microbial pollution, coastal waters 2400.
 bacteria, public health, accumulation, filter feeders, Gryphaea gar 3217.
 bacteria, water temperature, population levels, rivers, estuaries 4131.
 Bacteroides fragilis, membrane filtration, media (isolation), water 4936.
 bibliographies, microbial pollution, reviews, water analysis 4945.
 Candida, marine pollution, coastal waters 2399.
 coliforms, fecal coliforms, fishes, inactivation, waste water, marine environment 1499.
 coliforms, identification, incidence, water temperature relationship, lakes 557.
 coliforms, incidences, water resources, Iraq 2407.
 coliforms, membrane filtration, drinking water, microbial pollution 8421.
 Corynebacterium renale, use, Staphylococcus aureus bacteriophage phenotypes detection 4893.
 enterovirus, microbial pollution, seasonal variations, coastal waters, beaches 6708.
 Escherichia coli, phages, inactivation, sunlight, sea water 2402.
 Escherichia coli, Streptococcus, survival, marine environment 2395.
 fecal coliforms, coliforms, microbial pollution, drainage, water quality, soil amendment, manure, crop fields 6709.
 fecal coliforms, lipidic acid reduction, potentiometry, microbial pollution, water analysis 2392.
 fecal coliforms, Vibrio cholerae, Salmonella, microbial pollution, sewage outfalls, coastal waters 6711.
 fecal coliforms, water quality, pollution effects, waste water, canals 4132.
 microbial pollution, coliforms, pollution monitoring, spatial distribution, seasonal variations, lakes, USA 8419.
 microbial pollution, sewage effluents, hydrology, estuaries 6710.
 microbial pollution, water analysis, reviews, bibliographies 4945.
 mortality, temperature, digestion (aerobic), sewage sludge 1495.
 most probable number, computer applications, calculators 6731.
 pollution monitoring, water quality, rivers, Clostridium perfringens 5855.
 population dynamics, lagoons, sewage treatment, heterotrophic bacteria 9241.
 Pseudomonas aeruginosa, Streptococcus, chlorination, swimming pools 567.
 Salmonella, isolation, sludges, wastewater treatment, characterization, USA, Florida 4927.
 Salmonella typhi, membrane filtration, media (enrichment), water 4935.
 Streptococcus bovis, media (isolation), membrane filtration, water 5054.
 Streptococcus, incubation temperature, isolation, sediments, marine environment 8422.
 wastewater treatment 2342.
 wastewater treatment, water pollution, conferences 2550.
 water pollution, aquatic microorganisms, reviews, bibliographies 4944.
 water pollution, feces, man, isolation, Bifidobacterium adolescents, Bifidobacterium breve 562.
 water quality, bacteria, abundance, Bivalvia 8424.
 water reclamation, pollution control, viruses, Mycobacterium, Pseudomonas aeruginosa, Candida albicans 2394.
Indigenous species,
 bacteria, actinomycetes, yeasts, sewage treatment, ground water 5816.
 bacteria, community structure, nutritional status, biomass, ground water 5817.
 bacteria, ground water, population levels, pollutants biodegradation, waste water infiltration 5813.
Indigofera lineal,
 nodulation, inhibition, allelopathy, Parthenium hysterophorus 8987.
Indirect fluorescent antibody test,
 adenovirus infectivity, cell culture 4995.
 detection, antibodies, immunoglobulin M, tick-borne encephalitis virus, man 7557.
 detection, antibodies, mouse hepatitis virus infection, cell culture 590.
 detection, cytomegalovirus (human) antibodies 1551.
 detection, Vibrio cholerae, aquatic environment 9286.
 Ebola virus cell culture quantitation 1548.
 immunodiagnosis, La Crosse virus 596.
 micromethods, immunodiagnosis, African swine fever 1543.
 monoclonal antibodies, herpes simplex virus identification, typing 2429.
 parainfluenza virus detection, children 1565.
 use, Legionella pneumophila, antigens, heat treatments, comparison, formalin 792.
Indirect hemagglutination,
 antibody response, fowl cholera vaccination, chickens 3343.

Indirect hemagglutination, (continued)

- detection, *Mycoplasma hyopneumoniae* antibodies, comparison, enzyme-linked immunosorbent assay, complement fixation 740.
- detection, *Pasteurella* antibodies 723.
- hemorrhagic fever antibodies detection, viruses, man 7570.
- Pasteurella haemolytica* serotyping, methodology 1631.
- screening, cytomegalovirus antibodies, blood donors 2448.

Indolactam V,

- biosynthesis, tumor-promoting agents, actinomycetes 8653.

Indole,

- anaerobic bacteria, detection, reagents methodology 1664.
- compounds, *Cryptococcus neoformans* utilization, melanin pigments biosynthesis 2645.
- derivatives, synthesis, antifungal activity 6469.

Indole test,

- cost-benefit analysis, identification, *Escherichia coli* 6787.
- Pasteurella multocida* 716.
- reagents, identification, gram-negative bacilli 707.

Indole-3-acetic acid,

- role nodulation, nitrogen fixation, *Rhizobium leguminosarum* ssp. *Pisum sativum* 2167.
- Solanum tuberosum*, crown gall tumors, *Solanum tuberosum* tubers 8874.

Indoles,

- production, *Streptomyces*, *Bacillus*, *Azotobacter* 8229.

Industrial applications,

- alginate acid, *Pseudomonas*, *Azotobacter* 8618.
- antibiotics production, fermentation, cheese production, yeasts 9169.
- cellulose, chitin, chitosan, reviews, microorganisms 8619.
- dextrans, *Leuconostoc* 8617.
- enzymes, regulatory mechanisms, bacteria 851.
- β -glucans, batch culture, continuous culture, *Alcaligenes faecalis* var. *myxogenus* 8621.
- polysaccharides, books, microorganisms 9342.
- polysaccharides, fungi, yeasts 8620.
- production, griseofulvin, streptomycin, benzylpenicillin 9171.
- production, vaccines, antisera, immune serum globulin, bacteria, viruses 9218.

Industrial effluents,

- abattoirs, activated sludge, nutritive value, chickens 7015.
- anaerobic sludge, pollutants biodegradation, kinetics 1486.
- breweries, activated sludge, wastewater treatment 4091.
- breweries, incidence, Protozoa, Metazoa 3208.
- chloroform, cyanide, toxicity, methanogenic bacteria, digestion (anaerobic) 2376.
- digestion (aerobic), breweries, *Candida* 6701.
- digestion (anaerobic), distilleries, methanogenesis 2145.
- distilleries, nutrient requirements, urea, sodium phosphate, *Bacillus* 5818.
- distilleries, pulp mills, wastewater treatment, rotating discs, fungi 2341.
- dyes, wastewater treatment, activated sludge, carbon (activated) 6677.
- fertilizers, wastewater treatment, nitrogen removal, rotating discs, *Stichococcus bacillans*-identifying bacteria 9236.
- food industry, potatoes, wastewater treatment, fermentation 2350.
- food industry, wastewater treatment, digestion (anaerobic), methanogenesis 8405.
- food industry, wastewater treatment, trickling filters, activated sludge 4111.
- food processing, reactors, methanogenesis, bioreactors 7510.
- hydrocarbons, oil and gas industry, wastewater treatment, biodegradation, *Pseudomonas aeruginosa*, Egypt 2190.
- isotopes, phenols biodegradation, *Acinetobacter*, *Fusarium flocciferum* 8685.
- lignin, pulp mills, waste water, fungi, coastal waters 1455.
- meat industry, wastewater treatment, bioreactors, anaerobic conditions, pH, temperature, chemical oxygen demand effects on 3196.
- mining, metals, microbial pollution 415.
- mosses fermentation, digestion (anaerobic), methanogenesis 8401.
- munitions, wastewater treatment, denitrification, land disposal 2336.
- oil and gas industry, wastewater treatment, reviews 8403.
- paints, wastewater treatment, biodegradation 2380.
- pentachlorophenol, wastewater treatment 556.
- phenols, coal, wastewater treatment, aeration 4902.
- plastics, fluorine compounds, wastewater treatment 4896.
- pulp mills, biodegradation, digestion (anaerobic), toxicity, wastewater treatment, methanogenic bacteria 6669.
- pulp mills, digestion (anaerobic), *Clostridium butyricum* 3204.
- pulp mills, paper mills, mutagenicity removal, wastewater treatment, lagoons 4903.
- pulp mills, 12-chlorodehydroabietic acid, detoxification, *Mortierella isabellina* 2708.
- shales, bacteria survival 4135.
- wastewater treatment, anaerobic conditions, methanogenesis, acid production 9227.
- wastewater treatment, breweries, chemical oxygen demand 3201.
- wastewater treatment, dairy industry, rotating discs, microorganisms 6697.
- wastewater treatment, nitrification, denitrification 2373.
- wastewater treatment, nitrification, denitrification 8406.
- wastewater treatment, organic compounds, biodegradation, microorganisms 4090.

Industrial pollution,

- odors, deodorization, use peat 9232.

Industrial wastes,

- alkaline, food processing, wastewater treatment, *Zea mays* 8402.
- antibiotics production, *Pseudomonas* isolation, R factors characterization, antibiotic resistance 2208.
- ash, land disposal, nutrient availability, biodegradation, soil microorganisms 8257.
- biodegradation, pentachlorophenol, hexachloro-cyclopentadiene, parathion-methyl, bacteria, fungi 3677.
- biodegradation, substrates, haloaromatics 3207.
- chromium, acute toxicity, microorganisms, wastewater treatment 9229.
- coal mines, soil amendment, land reclamation, revegetation, microorganisms, role 3955.
- composting 5838.
- copper leaching, *Thiobacillus ferrooxidans*, *Leptospirillum ferrooxidans*, *Sulfobacillus thermosulfidophilus* 7301.
- digestion (anaerobic), methanogenesis, use, aquaculture, *Basidiomycetes* culture 8404.
- fermentation products, energy resources, processing, citrus 6102.
- fermentation, soil amendment, soil microorganisms 8258.
- fishery products, silage production, fermentation, lactic acid bacteria 2753.
- food industry, single-cell protein, production, amino acid composition, *Fusarium oxysporum* fsp. *liri* 1729.
- food processing, biotechnology, books 4233.
- food processing, composting, thermophilic fungi survival 4114.

Industrial wastes, (continued)

- food processing, digestion (anaerobic), methanogenesis, volatiles fatty acids 5704.
 - food processing, digestion (anaerobic), methanogenesis, use food drying, solar radiation 7489.
 - food processing, growth conditions, kinetics, optimization, *Candida utilis* 9225.
 - food processing, waste treatment, composting 6682.
 - freshwater pollution, pollution control, bacteria 4896.
 - land disposal, leachates, wastewater treatment 4920.
 - landfills, leachates, wastewater treatment, activated sludge 4084.
 - microorganisms, biodegradation, reviews 1018.
 - microorganisms, role, waste disposal, reviews 6704.
 - monomethyl sulfate biodegradation, *Hyphomicrobium* 1016.
 - oil and gas industry, waste treatment, land disposal, biodegradation, soil microorganisms 2178.
 - oranges, food processing, digestion (anaerobic) 6699.
 - organic compounds, waste treatment, biodegradation, microorganisms 1015.
 - paper mills, composting 5836.
 - paper mills, lignocelluloses hydrolysis, fuels production, cellulolytic microorganisms 7781.
 - pollution control, use, genetic engineering microorganisms 4125.
 - production, single-cell protein production, *Saccharomyces cerevisiae*, *Torulopsis* *ethanolivorans* 865.
 - quaternary alkylammonium compounds, biodegradation, *Pseudomonas* 1017.
 - textile industry, wastewater treatment, reviews, bibliographies 4915.
 - textile industry, wool, composting 5837.
 - toxics, waste treatment, use, biotechnology, methodology 8398.
 - waste treatment, conferences 4244.
 - waste treatment, digestion (anaerobic), digestion (aerobic), enzymes, microorganisms 547.
 - wastewater treatment, breweries, reviews, bibliographies 4913.
 - wastewater treatment, phenols extraction, monophenol monooxygenase, *Agricus bisporus* 5846.
 - wastewater treatment, reviews, bibliographies 4917.
 - wool, agricultural wastes, temperature, aeration, composting 4100.
 - Xenobiotics, biodegradation, bacteria 8393.
- Industrial water systems,**
- membranes, filtration, cleaning, enzymes, microorganisms 57.
- Industries,**
- bacteria films, air conditioning water 5849.
 - biotechnology, microorganisms, conferences 5950.
 - chemicals production, use immobilized enzymes, yeasts, *Aspergillus niger* 86.
 - immobilized cells, reviews 839.
 - enzymes, microorganisms, books 839.
 - enzymes, physicochemical properties, activity, microorganisms 58.
 - microbiology, methodology, biotechnology, books 4237.
 - occupational exposure, safety regulations, legislation, enzymes 45.
 - pharmaceuticals, microorganisms contamination 9147.
 - proteinases, reviews, microorganisms 2602.
 - wastewater treatment, gases odors, deodorization 9248.
- Infants,**
- man, nutritional status, immune status, breast milk heat treatments, microorganisms contamination 7038.
- Infectious bronchitis virus,**
- serotyping, hemagglutination inhibition 9280.
- Infectious bursitis virus,**
- agar precipitin test 8453.
 - antibodies, detection, enzyme-linked immunosorbent assay, methodology 5017.
 - disinfectants antiviral activity 4026.
 - Marek's disease virus, herpesvirus (turkey), live combined vaccines production, avian myeloblasts, chickens 7486.
- Infectious diseases,**
- bacteria, diagnosis methodology, man 4191.
 - chemotherapy, antibiotics antibacterial activity, antibiotic resistance 5099.
- Infectious mononucleosis,**
- Epstein-Barr virus, enzyme-linked immunosorbent assay immunodiagnosis, heterophagocytosis 603.
- Infectious pancreatic necrosis virus,**
- enzyme-linked immunosorbent assay, identification 2445.
 - identification, counter immunoelectrophoresis methodology 7563.
- Inflammatory diseases,**
- anaerobic bacteria, oral cavity, antibiotics sensitivity, man 7405.
- Infiorescence,**
- developmental stages, *Ananas comosus*, effects on infection pathogenesis, *Penicillium funiculosum*, *Fusarium moniliforme* var. *subglutinans* 8834.
- Influenza,**
- antibodies determination, protein A tests, man 3253.
- Influenza A virus,**
- antiviral activity, aryl-furfurane derivatives 4764.
 - antiviral activity, cell culture, herbal medicines, *Alternanthera philoxeroides* 7392.
 - attenuation, cold adaptations, recombinants, live vaccines 7484.
 - attenuation, recombinants, cold adaptations, live vaccines 7482.
 - attenuation, vaccines production 6602.
 - detection, methodology comparison, hemagglutination inhibition, hemolysis, man 4149.
 - diagnosis, radioimmunoassay methodology, man 4180.
 - disruption, Tween 80, diethyl ether, +tri-N-butyl phosphate 4076.
 - fluorescent antibody test identification 9278.
 - hemagglutinins isolation, density gradients centrifugation, bromelain cleavage 4994.
 - replication, α -interferon + rimantadine hydrochloride + ribavirin, inhibition 3066.
 - replication, antiviral activity, coumestrol 9112.
 - resistance development, 2-(1'-aminoethyl)-bicyclo[2,2,1]heptane chlorhydrate antiviral activity 4701.
 - vaccines recombinants, genetic analysis 5808.
 - verapamil, inhibition, replication, MDCK cells 8331.
- Influenza B virus,**
- antiviral activity, cell culture, herbal medicines, *Alternanthera philoxeroides* 7392.
 - detection, methodology comparison, hemagglutination inhibition, hemolysis, man 4149.
 - hemagglutinins biosynthesis, ribavirin antiviral activity, cell culture 8322.
 - immunodiagnosis, enzyme-linked immunosorbent assay comparison hemagglutination inhibition 605.

- fluenza virus**, antibodies, complement fixation assays 3235.
 antiviral activity, distamycin A, analogs, structure-activity relationships, synthesis 5472.
 antiviral activity, roseofungin 6485.
 cloning, hemagglutinins, neuraminidase, production, vaccines 6598.
 envelopes proteins, isolation, immunogenicity, vaccines production, mice 6620.
 fluorescent antibody test identification 9278.
 genetic engineering, vaccines production 6604.
 hemagglutinins, expression, cloning vectors, immunogenicity, antigenicity, vaccines production 6636.
 hemagglutinins genes, vaccinia virus transfection, gene expression, induction antibody response, hamsters, rabbits 4887.
 hemagglutinins, immunodiffusion standardization 4993.
 hemagglutinins purification, affinity chromatography 8435.
 hemagglutinins, stimulation natural killer cells cytotoxicity, use vaccines production 6647.
 immunogenicity, proteins, isolation 1704.
 levels, vaccines 2320.
 membrane proteins, liposomes incorporation, vaccines, immunogenicity, rabbits 2650.
 neuraminidase, antibodies detection, enzyme-linked immunosorbent assay methodology 1567.
 protein M, use, enzyme-linked immunosorbent assay, detection, antibodies 1541.
 recombinants, pathogenicity, vaccines production 6606.
 structural proteins analysis, erythrocytes adsorption 5887.
 synthetic antigens, vaccines production, immunogenicity 6601.
formation systems, computer applications, clinical microbiology, bacteria analysis 6770.
 data analysis, fermentation 7796.
fuel oil fluids, raw materials use production, contamination, bacteria, fungi 8342.
GA,
 Dark, nitrogen-fixing bacteria activity 8147.
heritance,
 Ac7 locus, association white rust, *Albugo candida* disease resistance, Brassica napus 2854.
Ascochyta pinodella blight disease resistance, plant breeding, *Pisum sativum* 2037.
 barley yellow dwarf virus disease resistance, plant breeding, *Avena sativa* × *Avena sterilis* 8072.
 disease resistance, *Botrytis cinerea*, *Didymella applanata*, plant breeding, *Rubus idaeus* 3869.
 disease resistance, *Bremia lactucae* downy mildew, *Lactuca sativa*, field trials 2628.
 disease resistance, leaf rust, plant breeding, seedlings, *Secale cereale* 8907.
 disease resistance, *Lycopersicon*, *Phytophthora nicotianae* f.sp. *nicotianae*, foot rot, root rot 296.
 disease resistance, *Plasmiodiophora brassicae* clubroot, Brassica napus, Brassica oleracea 300.
 disease resistance, *Pseudomonas syringae* tabaci wildfire, *Alternaria alternata* 2037.
 disease resistance, *Puccinia polysora* rust, *Zea mays* 8071.
 disease resistance, *Rhizoctonia solani* root rot, *Phaseolus vulgaris* 2069.
 Fusarium oxysporum f.sp. *apli* yellows disease resistance, *Apium graveolens* 8066.
 nodulation, *Rhizobium*, nitrogen fixation, plant breeding, *Medicago sativa* 2979.
Phaseolus vulgaris, *Xanthomonas campestris* pv. *phaseoli* blight 4501.
Phytophthora infestans, pathogenicity, *Solanum tuberosum* 2815.
 plant breeding, disease resistance, *Erysiphe chichoracearum*, powdery mildew, host-pathogen interactions, *Cucurbita moschata* 3862.
 potato virus M disease resistance, *Solanum gourlayi* 6294.
Puccinia graminis stem rust, disease resistance, *Triticum aestivum* 6293.
Puccinia striiformis stripe rust disease resistance, plant breeding, *Triticum aestivum* 786.
Pyricularia oryzae blast disease resistance, *Oryza sativa* 5493.
 root rot disease resistance, *Triticum* 2885.
 seeds yield, nitrogen, *Bradyrhizobium japonicum* inoculation effects on, Glycine max 5660.
 soybean mosaic virus disease resistance genes, Glycine max 2853.
 strips rust disease resistance, growth stage, vegetative cells, *Triticum hybrids* 2886.
 zucchini yellow mosaic virus disease resistance, zym gene, linkage analysis, *Cucumis melo* 5478.
hibitors,
 chymotrypsin, production, *Streptomyces* 7858.
 8- β -glucuronidase, purification, characterization, *Micromonospora* 5105.
 proteinase, production, *Gaeumannomyces graminis* var. *tritici* 8374.
 proteinase, prolinin, purification, characterization, *Cephalosporium* 8523.
 subtilisin, thermal denaturation, C.D., *Streptomyces* 7674.
 triacylglycerol lipase, purification, characterization, *Mycobacterium tuberculosis* 4263.
 viruses, antiviral activity, characterization 5744.
infection systems, experimental infection, *Solanum tuberosum* 4495.
lures,
 Escherichia coli, antibiotics sensitivity, cell surface hydrophobicity 2241.
oculum potential,
 actinomycorhizas, roots colonization, competition, trees 5563.
 Glomus fasciculatum, colonization, roots density, *Trifolium subterraneum*, *Medicago truncatula* 8217.
 Peronospora tabacina, pathogenesis, seasonal variations, *Nicotiana tabacum* 4548.
 vesicular-arbuscular mycorrhizas, competition, *Glomus tenue*, *Glomus fasciculatum*, *Gigaspora decipiens*, plants 8973.
 vesicular-arbuscular mycorrhizas, *Gigaspora decipiens*, *Glomus fasciculatum*, *Glomus tenue*, plants 8972.
organic pyrophosphatase, active sites conformation, asymmetry induction, kinetics, *Saccharomyces cerevisiae* 3434.
 hydrolysis, 5-O-(3-thiophosphatase), yeasts 3511.
 interaction magnesium, manganese, phosphate ligands, X-ray scattering, yeasts
- inorganic pyrophosphatase, (continued)**
 3487.
 purification, characterization, kinetics, *Schizosaccharomyces pombe* 5154.
inosine,
 production, ribonucleosides metabolism, mutants, *Brevibacterium ammoniagenes* 5207.
5'-inosinic acid,
 biosynthesis, antibiotics effects on, *Brevibacterium ammoniagenes* 6063.
 biosynthesis, *Brevibacterium ammoniagenes* 6062.
inositol-binding protein,
 purification, characterization, *Pseudomonas* 5955.
inotropism,
 biological activity, N⁶-(2-hydroxyethyl) adenosine, purification, Cordyceps, Isaria 6060.
Insecta,
 Bacillus thuringiensis, nuclear polyhedrosis virus, biological control, environmental factors 2671.
 bacteria pathogens, surveys, use, biological control 4390.
 biological control, conferences 846.
 biological control, microorganisms 8639.
 biological control, pathogens propagation, whey recycling methodology, *Bacillus thuringiensis*, δ -toxin 8899.
 Fusarium, biological control, reviews 6926.
 host range, biological control, *Erynia pieris* 6906.
 interspecific relationships, Fusarium, host range, biological control, reviews 5215.
 microorganisms biological control, reviews 6073.
 microorganisms, biological control, mutants 6077.
 pathogenicity, antigenic characteristics, *Bacillus thuringiensis* subsp. *colmeri* 6913.
 pest control, biological control, viruses 1844.
 toxicity, spore crystals, *Bacillus thuringiensis* subsp. *darmstadtensis* 6082.
 viruses, biological control, reviews 7772.
Insecticides,
 antifungal activity, powdery mildew, *Erysiphe pisi*, pathology, *Lens culinaris* 8917.
 chemical control, Aleyrodidae, vectors, mung bean yellow mosaic virus, *Vigna radiata* 2055.
 disease control, *Myzus persicae*, vectors, potato leaf roll virus infection, *Solanum tuberosum* 2065.
 effects on vesicular stomatitis virus infection, mammalian cells, cell culture 2434.
 exotoxins assays, high-performance liquid chromatography, biological control, *Bacillus thuringiensis* 2766.
 inhibition nitrogen fixation, rhizosphere microorganisms, paddy fields 1283.
 Saccharomyces cerevisiae biodegradation, association, fermentation 990.
 seed treatments, chemical control, fungicides, *Hordeum*, *Rhopalosiphum maidis* 6317.
 toxicity, Saccharomyces cerevisiae, nontarget organisms, wine fermentation 2082.
Insuilin,
 production, gene transfer, bacteria 3524.
Integrated control,
 nuclear polyhedrosis virus, pesticides, *Heliothis armigera* 977.
 pesticides + *Bacillus thuringiensis*, nuclear polyhedrosis virus, *Heliothis virescens* 135.
 plant diseases 1217.
 Trichoderma viride + fungicides, inhibition *Chondrostereum purpureum* spore germination, silver-leaf disease, pruning wounds, *Prunus domestica* 5588.
 vectors, pest control 7648.
 Verticillium lecanii + carbaryl + iprodione, spore germination, inhibition, Aphididae 2654.
 weed control, pathogens 3898.
interferon,
 activity, plaque assay, Sindbis virus 632.
 + antibodies, antiviral activity, conjunctiva cell culture, man 2227.
 antiviral activity, bioassays, herpes simplex virus, vesicular stomatitis virus, in vitro 4773.
 antiviral activity, cytomegalovirus (human), herpes simplex virus 2, herpes simplex virus 1 9121.
 antiviral activity, herpes simplex virus, poliovirus 2233.
 antiviral activity, herpes simplex virus 1, *Escherichia coli*, expression 4028.
 antiviral activity, herpes simplex virus 2 9114.
 antiviral activity, herpesvirus, cell culture, mice 2226.
 antiviral activity, Japanese encephalitis virus, respiratory syncytial virus 1346.
 antiviral activity, L cells, factors affecting 466.
 antiviral activity, mammalian cells, recombination, DNA 4778.
 antiviral activity, microinjection, antibodies, effects on 9111.
 antiviral activity, respiratory tract isolates, cattle 4759.
 antiviral activity, vesicular stomatitis virus, Semliki Forest virus, cell culture 7389.
 antiviral activity, viruses, characterization, reviews 8327.
 antiviral activity, viruses infection, HeLa cells, mice L cells 1350.
 assays preparation, viruses inactivation methodology 8459.
 +9-[1,3-dihydroxy-2-propoxymethyl]-guanine, inhibition DNA biosynthesis, herpes simplex virus 2 6480.
 +9-[1,3-dihydroxy-2-propoxymethyl]guanine, replication, antiviral activity, cytomegalovirus (human) 9115.
 herpes simplex virus transformed cells, effects on 462.
 induction, L cells, antiviral activity, vesicular stomatitis virus, Newcastle disease virus 467.
 like compounds, disease resistance, plant viruses, plants 4573.
 like proteins, disease resistance, plants 6288.
 production, gene transfer, bacteria 3524.
 production, genetic control, lac promoter, tryplac promoter, *Escherichia coli* 3424.
 +**interferon**,
 + antiviral agents, antiviral activity synergism, varicella-zoster virus 4766.
 disease control, infectivity, replication, tobacco mosaic virus, *Nicotiana tabacum* 8928.
 +rimantidine hydrochloride, +ribavirin, inhibition, replication, influenza A virus 3066.
 subunits, disulfide bonds, relationship conformation, antiviral activity, man 8477.
 vesicular stomatitis virus infected cells, effects on protein biosynthesis 6470.

- β-interferon**, gene expression, cloning, *Escherichia coli*, characterization, antiviral activity, man 2228.
- γ-interferon**, antiviral activity, retrovirus, cell culture 7390.
- Intergeneric hybridization**, *Streptococcus myohelophilus* × *Streptomyces coelicolor*, recombination, antibiotics biosynthesis 7411.
- Interspecific hybridization**, protoplast fusion, *Saccharomyces cerevisiae* × *Saccharomyces diastolicus* 5925.
- Interspecific relationships**, *Cladosporium* antagonism, *Melampsora larici-populina*, leaf rust, hybrids, *Populus* 381.
- mycorrhizas, *Helicotylenchus digonicus* parasitism, roots, mycorrhizas, *Pinus strobus* 348.
- rhizosphere microorganisms, pedogenesis 394.
- Intestinal microflora**, biotin nutrient availability, oral administration, *Lactobacillus acidophilus* + antibiotics, chickens 2750.
- coliforms, inhibition, *Lactobacillus oral administration*, chickens 2751.
- Escherichia coli*, man, amoxicillin, cephradine, antibiotic resistance 6419.
- gram-positive bacteria, animal isolates, antibiotic sensitivity testing, growth regulators, feeds additives 3729.
- lactic acid bacteria antagonism, colibacillosis prevention, chickens 1064.
- rats, ecosystem analysis, methodology 7587.
- Infection**, Zea mays, food contamination, mycotoxins, cattle 6205.
- Introduced species**, phytopathogenic fungi spores, quarantine, New Zealand 6329.
- Inulin**, excision, methodology, cellulase, exo-cellulohydrolase genes, clones, *Trichoderma reesei* 8568.
- Inulin**, fermentation, ethanol production, *Helianthus tuberosus*, stalks, *Kluyveromyces marxianus* 5298.
- hydrolysis, fructose production, inulinase, immobilized enzymes, *Kluyveromyces fragilis* 8548.
- Inulin fructotransferase (depolymerizing)**, biosynthesis, factor affecting, *Arthro bacterium ureafaciens* 4340.
- Inulinase**, association, β-D-galactosidase, production, batch culture, continuous culture, *Kluyveromyces fragilis* 7709.
- biosynthesis, characterization, *Aspergillus niger* 6039.
- immobilized enzymes, inulin hydrolysis, fructose production, *Kluyveromyces fragilis* 8548.
- production, fermentation, optimization, *Aspergillus niger* 5179.
- suppressor mutant, fructose production, *Pichia polymorpha* 3526.
- Invertase**, immobilization substrates 3507.
- Invertebrata**, interspecific relationships, soil microorganisms, decomposition, leaf litter, colonization, forest floor 7222.
- Iodide**, antifungal activity, *Aspergillus fumigatus* spores, *Candida albicans* 4014.
- Iodine**, antiseptics, antimicrobial activity 2416.
- derivatives, disinfection 1507.
- disinfectants, antiviral activity, African swine fever virus 1345.
- disinfectants, antiviral activity, retrovirus (avian), infectious bursitis virus 4025.
- +N-(p-hydroxyphenyl) glycine complexes, antimicrobial activity 4033.
- solutions, preservation, marine bacteria 6760.
- leaf dips, prophylaxis, mastitis, cattle 4959.
- Iodoacetic acid**, soil pollution, effects on soil microorganisms biodegradation glucose, calorimetry 2933.
- 2-Iodobenzonitrile**, +*Trichoderma viride*, integrated control, silver-leaf disease, *Prunus domestica* 5588.
- use, *Cornarium quercuum f.sp.banksianae* rust disease control, *Pinus* 3916.
- Iodoxyuridine**, sensitivity, typing, herpes simplex virus, clinical isolates 594.
- Iodometry**, chemical analysis, copper-chrome-arsenic, wood preservatives 7244.
- micromethods, detection, *Pseudomonas aeruginosa* β-lactamase 8562.
- Iodophors**, contamination, *Pseudomonas aeruginosa*, characterization 7399.
- Pseudomonas aeruginosa*, contamination, association, polyvinyl chloride, role, survival 6723.
- Ion exchange**, formate dehydrogenase purification 7733.
- Ion-exchange chromatography**, cholesterol oxidase, *Streptomyces lavendulae* 4307.
- neocarzinostatin purification, characterization, *Streptomyces carzinostaticus* 4374.
- purification, acetyl-CoA acetyltransferase, 3-hydroxybutyryl-CoA dehydrogenase, *Cladosporium kluyveri* 8588.
- purification, *Chlamydia* antigens 728.
- Ionic strength**, effects on DNA binding, chromatography, RNA polymerase III 7704.
- Ionizing radiation**, antifungal activity, fungi contamination, cacao beans 4558.
- mycorrhizas, symbiosis, plants, effects on 8978.
- preservation, food, reviews 8714.
- sterilization 1363.
- β-Ionone**, derivatives, antifungal activity, antibacterial activity 6491.
- derivatives, antimicrobial activity 6486.
- Ions**, effects on virginiamycin binding ribosomes 8376.
- Fusarium graminearum*, effects on galactose oxidase kinetics 922.
- metals, effects on *Thermomonospora fusca* cellulase activity 1804.
- oxygen, production, cerospirin, photobiondion 7801.
- sewage effluents effects on, poliovirus adsorption, soil 4934.
- Iontophoresis**, antibacterial activity, *Escherichia coli*, association catheterization 734.
- Ipomoea batatas**, disease resistance, *Streptomyces ipomoea*, screening projects 4583.
- Eisnoe batatas scab, tubers yield 8007.
- farnesol dehydrogenase, black root, *Ceratocystis fimbriata*, effects on 7187.
- little leaf, mycoplasma-like organisms 8286.
- oxalic acid levels, fungi infection 6281.
- Ipomoea coccinea**, latent infection, *Euphorbia lathyris*, weeds, USA, Arizona 8044.
- Ipomoea fistulosa**, Acroporus powdery mildew, new records, India 2038.
- Ipridione**, disease control, Pythium, dieback, *Daucus carota* 8116.
- Iprodione**, antifungal activity, resistance, *Aspergillus nidulans*, *Cladosporium cucumerinum*, *Penicillium italicum* 8296.
- +carbaryl, +*Verticillium lecanii*, integrated control, spore germination, inhibition, *Aphididae* 2654.
- effects on nitrification, ammonification, respiration, soil microorganisms 1286.
- +metaxyl, fumigation, comparison, drenches, disease control, *Phytophthora fragariae* infection, *Fragaria* 1182.
- pesticide resistance, *Sclerotium cepivorum* 5529.
- resistance, *Sclerotium cepivorum* 6312.
- rhizotonia sensitivity 8106.
- Ips typographus**, mixed infection, *Ceratocystis*, defensive mechanisms, *Picea abies*, Norway 1237.
- Iran**, Gramineae, rhabdovirus transmission, *Ribautodelphax notabilis* role 262.
- Iraq**, *Nicotiana tabacum* leaves mycoflora aflatoxins biosynthesis 7089.
- water resources, coliforms indicator species incidences 2407.
- Iris**, detection, viruses infection, use, electrophoresis 8816.
- Iris mild mosaic virus**, infection, detection, use, electrophoresis, *Iris* 8816.
- Iris severe mosaic virus**, infection, detection, use, electrophoresis, *Iris* 8816.
- Iron(I)**, antifungal activity, *Aspergillus fumigatus* spores, *Candida albicans* 4014.
- oxidation, ferrous sulfate, *Thiobacillus ferrooxidans*, kinetics, chemostats 3000.
- role leaching, cobaltous sulfide, *Thiobacillus ferrooxidans* 9030.
- Iron(II)**, brite, ferricocin, purification, characterization, *Aspergillus versicolor* 8521.
- pyridine, oxidation, leaching, mining, iron-oxidizing bacteria 5689.
- scandium(III) enterobactin complex, antibacterial activity, gram-negative bacteria 5727.
- Iron**, biogeochemistry, microorganisms, reviews 8208.
- characterization, hydrogenase, *Methanobacterium thermoautotrophicum* 8560.
- chelating agents, catecholamide, bacteriostats, fungistats 448.
- chelating agents, inhibition *Clostidium botulinum* toxins, pork, minced meat 7035.
- chelating agents, parabactin, bis-N1, N8-(2,3-dehydroxybenzoyl)spermidine, antiviral activity, ribonucleoside-diphosphate reductase, DNA biosynthesis, herpes simplex virus 1, vesicular stomatitis virus 8335.
- molybdenum complex, nitrogenase, substrate specificity, spectroscopy, nitrogen-fixing bacteria 2607.
- molybdenum proteins, cofactors, nitrogenase, C.D., *Klebsiella pneumoniae* 5141.
- molybdenum sulfur complex, nitrogen binding, models, nitrogenase 2605.
- nutrient requirements, *Aspergillus aflatoxins* biosynthesis 7088.
- nutrient uptake, rhizosphere microorganisms, plants 5627.
- nutrient uptake, stimulation, vesicular-arbuscular mycorrhizas, *Arachis hypogaea* 5641.
- proteins, modification, nitrogenase, nitrogen fixation regulation, *Rhodospirillum rubrum* 2811.
- reduction enzymatic activity, *Rhodospseudomonas sphaeroides*, electrophoresis methodology 3347.
- reduction, rhizosphere microorganisms, fertilizer applications effects on, *Oryza sativa* 7297.
- Iron phosphate**, solubilization, *Pseudomonas striata*, *Aspergillus awamori* 6350.
- Iron-oxidizing bacteria**, iron(III) oxidation, pyrite, mining, leaching 5689.
- Iron-sulfur centers**, *Clostidium botulinum* vegetative cells, nitrite effects on 6203.
- levels, nitrogenase, *Azotobacter vinelandii* 2608.
- Iron-sulfur proteins**, purification, characterization, *Chromatium warmingii* 4262.
- Iris lacteus**, endo-1,4-β-D-xylanase, purification, characterization 7751.
- Irpex pachyodon**, methyl-α-oxohydroxamaloacetate, effects on protons pumps, respiration (cyanide insensitive), roots, *Triticum aestivum* 8745.
- Irrigation**, effects on *Macrophoma phaseoli* infection, *Helianthus annuus*, pathogenesis association developmental stages 1142.
- sprays, waste water, bacteria dispersion 9250.
- use, metam + sodium, disease control, *Verticillium dahliae* infection, *Solanum tuberosum*, effects on yield 1209.
- waste water aerosols, viruses microbial pollution, public health risks, reviews 2336.
- waste water, crop fields, soil properties, bacteria, characterization 4924.
- waste water, dispersal, bacteria, airborne microorganisms 1456.
- waste water, microbial pollution, enterovirus, ground water 5852.
- waste water sprays, coxsackievirus B5 seroprevalence, occupational exposures man 4096.
- water, *Escherichia coli*, pathogens reduction, solar radiation 9249.
- water salinity effects on vesicular-arbuscular mycorrhizas vertical distribution, *Citrus* 1255.
- Zea mays, effects on seed-borne diseases, *Fusarium moniliforme* colonization 79.
- Irrigation systems**, sediments, detection, *Plasmodiophora brassicae*, role, *Brassica oleracea* var. capitata clubroot 3820.
- Isoarja**, N⁶-(2-hydroxyethyl) adenosine, purf. cation, biological activity, calcium antagonists, isotropism, guinea-pigs 6060.

- aria tax**, biological control, *Idioscopus clypealis* 7767.
- anthizone**, antiviral activity, transmissible gastroenteritis virus 1344.
- landic acid**, Penicillium islandicum production, effects on Yoshida sarcoma cells growth, phage M2 DNA transfection 9120.
- lands**, biogeography, models, host-pathogen interactions, *Ustilago violacea*, *Viscaria vulgaris* 3640.
- obutane**, metabolism, biodegradation, oxygenase activity, *Nocardia paraffinicum* 8275.
- isocaprolyl-3-hydroxymethyl-4-hydroxybutyrolactone**, intracellular levels, effects on streptomycin biosynthesis, energy charge, sporulation, *Streptomyces griseus* 4846.
- isocitrate dehydrogenase**, *Azotobacter chroococcum*, activity, nitrogen fixation, strains screening methodology 1637.
- isoenzymes**, purification, characterization, *Escherichia coli* 7712.
- regulation**, isocitrate dehydrogenase kinase, isocitrate dehydrogenase phosphatase activity, relationship, ATP role 7711.
- isocitrate dehydrogenase kinase**, activity, ATP role, relationship, isocitrate dehydrogenase regulation, *Escherichia coli* 7711.
- purification**, characterization, *Escherichia coli* 7715.
- isocitrate dehydrogenase phosphatase**, activity, ATP role, relationship, isocitrate dehydrogenase regulation, *Escherichia coli* 7711.
- purification**, characterization, *Escherichia coli* 7715.
- isocitrate lyase**, assays, *Yersinia pseudotuberculosis* subsp. *pestis* identification methodology 1623.
- induction**, purification, characterization, *Escherichia coli* 4280.
- isocitric acid**, production, glucose fermentation, *Candida ravautii* 5961.
- isocyanate-penicillanates**, synthesis, stereoselectivity 6535.
- electric focusing**, esterase, *Yersinia enterocolitica*, *Yersinia pseudotuberculosis* subsp. *pseudotuberculosis* 6856.
- 1,6-D-glucan synthase**, 1,6- α -D-glucan synthase, *Streptococcus mutans* 28.
- hydrolyase**, multienzyme complexes, *Trichoderma reesei* 8572.
- measles virus** proteins 2558.
- proteolytic enzymes**, *Streptomyces* 4288.
- Streptococcus pyogenes** toxins, mitogenicity 2764.
- electric points**, lactase, *Polyporus anisoporus* 7722.
- chelenin**, antifungal activity 5742.
- isoleucine**, inhibition, threonine dehydratase activity, allosteric properties, kinetics, *Clostridium carlsbergensis* 7727.
- omagnolol**, *Sassafras randainae*, isolation, chemical properties 454.
- ornatose**, formation, glucose conversion, exo-1,4- α -D-glucosidase, kinetics, *Rhizopus niveus*, *Aspergillus niger* 3464.
- hydrolysis**, exo-1,4- α -D-glucosidase, *Aspergillus niger* 3473.
- production**, purification 3534.
- onilazid**, antibacterial activity, mycolic acids biosynthesis, *Nocardia* 9098.
- drug resistance**, *Mycobacterium tuberculosis* 4721.
- drug resistance**, *Mycobacterium tuberculosis*, clinical isolates, USA, Texas 6422.
- drug sensitivity testing**, drug resistance, *Mycobacterium tuberculosis* 4717.
- drug sensitivity testing**, drug resistance, *Mycobacterium tuberculosis* 6443.
- drug sensitivity testing**, *Mycobacterium tuberculosis*, radiometry 3051.
- penicillin N epimerase**, penicillin analogs enzymatic synthesis, *Streptomyces clavuligerus* 5776.
- penicillin N synthetase**, penicillin analogs enzymatic synthesis, *Streptomyces clavuligerus* 5776.
- penicillin biosynthesis**, *Cephalosporium acremonium* 9195.
- penicillin biosynthesis**, pathway, *Cephalosporium acremonium* 6528.
- penicillin N epimerase**, *Streptomyces clavuligerus*, purification, characterization 1819.
- opropyl N-phenylcarbamate**, biodegradation, bacteria, water isolates 6945.
- 4-O-isopropylidene-3,3',4',5'-tetrahydroxystilbene**, antifungal activity 8309.
- oprotiolane**, aflatoxin B1 production, effects on, *Aspergillus parasiticus* 3745.
- inhibition** *Pycnaricia oryzae*, appressoria penetration, blast, *Oryza sativa* 2892.
- peristone**, persistence, soil, biodegradation, microorganisms 4630.
- othiazolidinone**, conversion, β -lactam antibiotics, models, penicillin biosynthesis 6530.
- isothiocyanate-penicillanates**, synthesis, stereoselectivity 6535.
- oxazole**, synthesis, antibacterial activity, ampicillin chemical modification 1398.
- isoxazole benzoxazoles**, antimicrobial activity, microorganisms, characterization 8340.
- oxazole-(3,4-c)-pyrazole hexazadibenzocyanine**, antimicrobial activity 7383.
- oxazolyli thiazolidin-4-ones**, antifungal activity, fungi, characterization 8313.
- israel**, *Bacillus thuringiensis* subsp. *israelensis*, biological control, *Culex pipiens*, *Aedes aegypti* 2672.
- Bacillus thuringiensis* subsp. *israelensis*, biological control, *Culex pipiens*, *Aedes aegypti* 3543.
- beet western yellows virus**, plant diseases, *Beta vulgaris*, *Lactuca sativa*, Brassica 4539.
- soil**, spores, *Glomus*, *Sclerocystis* 6337.
- israel (continued)**, *Solanum tuberosum*, *Alternaria alternata* pathogenicity 6284.
- itaconic acid**, production, *Aspergillus terreus* immobilized cells 862.
- Italy**, *Capsicum annuum*, pepper mild mottle virus infection, pepper mottle virus disease resistance, new records 4566.
- Castanea dentata* isolates, *Cryphonectria parasitica* virulence conversion, blight biological control 6326.
- Castanea dentata* isolates, *Cryphonectria parasitica* virulence conversion, blight biological control 6327.
- Malus pumila*, blister spot, *Pseudomonas syringae* var. *papularis*, pathology 7161.
- Olea europaea*, cucumber mosaic virus isolation 6248.
- Salmonella* isolation, antibiotic sensitivity testing 9160.
- Staphylococcus*, clinical isolates, methicillin, antibiotic sensitivity testing 7441.
- Triticum durum*, *Woyonovicia graminis* infection 7956.
- itraconazole**, antifungal activity, new records 9104.
- iturin A**, *Bacillus subtilis*, amino acid composition 2301.
- Bacillus subtilis*, effects on *Saccharomyces cerevisiae* growth, cytoplasmic membranes structure 4886.
- Ivory Coast**, *Pennisetum americanum*, plant diseases, guinea grass mosaic virus, etiology 4512.
- ixodes dammini**, spirochaetes isolation, media (selective), Lyme disease association 2494.
- Jamaica**, *Wissadula periploclifolia*, little leaf etiology, rickettsia-like organisms, mycoplasma-like organisms, new records 2046.
- Wissadula periploclifolia*, little leaf, rickettsia-like organisms, mycoplasma-like organisms, disease transmission, treatment 2047.
- Japan**, composting, waste treatment, biotechnology 4923.
- fruit trees, viruses identification 3811.
- man, yersiniosis epidemiology, *Yersinia* incidence, cow's milk 7007.
- ivers, water pollution, viruses 8423.
- Japanese encephalitis virus**, antibodies, cerebrospinal fluid, man, radioimmunoassay, detection 615.
- antigens, detection, agglutination, protein A 4991.
- antiviral activity, interferon 1346.
- enzyme-linked immunosorbent assay, immunoglobulin M, immunoglobulin G, serum, experimental infection, pigs 5011.
- immunodiagnosis, immunoglobulin M detection, serum, radioimmunoassay 593.
- seroepidemiology, hemolysis, detection antibodies, man 4996.
- Juglans**, allelopathy, *Rhizobium*, Frankia, nitrogen fixation 3959.
- Juglans cinerea**, canker, *Sirococcus clavigignenti-juglandacearum*, conidia, survival, airborne microorganisms 1138.
- Sirococcus clavigignenti-juglandacearum* canker, pathogenicity, disease spread, plantations 7991.
- Juglans hindsi**, blackline disease, cherry leaf roll virus etiology 4530.
- Juglans nigra**, growth association *Gnomonia leptostylia* anthracnose 3918.
- growth, fertilization+vesicular-arbuscular mycorrhizas inoculation, *Glomus fasciculatus* 7229.
- 5-hydroxy-1,4-naphthoquinone, hydrojuglone glucoside, relationship, disease resistance, *Gnomonia leptostylia*, anthracnose 3855.
- leafspot, *Mycosphaerella juglandis* sp. nov 7163.
- plantations, anthracnose epidemics incidence, USA, Illinois 7995.
- Juglans regia**, orchards, root rot, crown rot, *Phytophthora* 271.
- transmission (vertical), cherry leaf roll virus, virus-like particles, localization, pollen, anthers 7990.
- Juices**, grapes, yeasts growth measurement, nephelometry methodology 7851.
- oranges, frozen products, microorganisms enumeration 7850.
- Sorghum*, Fermentation, ethanol production, Yeasts 5302.
- Juncus roemerianus**, lignin, mineralization, fungi, role, marine environment 1028.
- lignocelluloses, biodegradation, microorganisms 2704.
- Junion**, effects on *Aspergillus niger* morphology, use, biomass measuring techniques 1677.
- Kabatella caulivora**, scorch, disease resistance, plant breeding, varieties, Medicago 6291.
- Kalanchoe blossfeldiana**, spot, bacteria, etiology 4555.
- Kalanchoe latent virus**, cytopathology, *Chenopodium quinoa* 7174.
- Kanamycin**, antibiotic resistance, genes, cloning, *Streptomyces* 1314.
- antibiotic resistance, R factors characterization, clinical isolates, *Staphylococcus aureus* 9178.
- antibiotic resistance, R factors transfer, *Staphylococcus aureus* 9044.
- antibiotic resistance, *Staphylococcus aureus*, relationship protein A biosynthesis 9054.
- antibiotic sensitivity testing, gram-negative bacteria, isolation, heart surgery postoperative infection 3107.
- labelling, enzyme immunoassay 3109.
- resistance genes, hybridization analysis, transposons, gene expression, *Escherichia coli*, *Rhizobium meliloti* 442.
- stimulation IMP biosynthesis, *Brevibacterium ammoniagenes* 115.
- stimulation IMP biosynthesis, *Brevibacterium ammoniagenes* 952.
- Kanamycin 6'-acetyltransferase**, activity, aminoglycoside antibiotics chemical modification, *Escherichia coli* antibiotic resistance correlation 5714.
- Karbamecin**, *Streptomyces*, biosynthesis, structure, antibacterial activity, gram-negative

Karabemycin, (continued)

- bacteria, gram-positive bacteria 1437.
- Kasimir bee virus**,
antiseria production 5891.
- Kaur-18-en-19-olc acid**,
isolation, *Helianthus annuus*, antibacterial activity, *Staphylococcus aureus*,
Mycobacterium smegmatis 4009.

Kauranol,

conversion, *Rhizopus nigricans* 5248.

Kauranones,

conversion, *Rhizopus nigricans* 5248.

Keñir,

organoleptic evaluation, production, lactic acid bacteria 1055.

Kerallin,

burning, anesthesia, apiculture, *Apis mellifera* 4230.

Keratinophilic fungi,

growth, sporulation, soil, volatiles organic compounds production effects on 5643.

soil microorganisms, Spain 6336.

Keratoconjunctivitis,

cattle, *Moraxella bovis*, media (isolation) 2452.

12-Ketochendoxychoylic acid,

synthesis, dehydrocholic acid reduction, activity, NADH regeneration 6090.

Ketoconazole,

antibiotics, antifungal activity, relative inhibition factors measurements,

dose-response effects 4017.

antifungal activity, *Candida* 4753.

antifungal activity, *Conidiobolus*, *Basidiobolus* 7380.

antifungal activity, germ tubes formation, spore germination, *Trichophyton*

mentagrophytes 5738.

antifungal activity, reviews 7381.

Cryptococcus neoformans growth inhibition 1407.

drug sensitivity testing, *Candida albicans* 5741.

effects on, growth, *Candida albicans* 4754.

susceptibility methodology, dermatophyte fungi 1336.

3-Ketodihydroxyphingosine synthetase,

inhibition, L-cycloserine, *Bacteroides livii* 7472.

2-Ketoglutarate,

purification, acetonate hydratase, histidine ammonia-lyase, formation, *Bacillus*

subtilis 4281.

Ketone,

alicyclic ring, biodegradation, reviews 8277.

Ketones,

production, alcohol oxidation, *Corynebacterium equi* 8649.

Kidney,

cell culture, hepatitis A virus production, fetuses, *Macaca mulatta* 5882.

cell culture, monkeys, rotavirus (human) isolation methodology 3233.

cells, cell culture comparison, fibroblasts, herpes simplex virus isolation 4981.

cells, herpes simplexvirus detection methodology 4988.

cells, monkeys, isolation, rotavirus (human) 1560.

Conarium mushroom poisoning, clinical aspects, man 1903.

Kidney diseases,

bacteria recovery methodology, man 1633.

Renibacterium salmoninarum, bacterins vaccines, *Salmo gairdneri* 6662.

Kievitene hydratase,

purification, characterization, *Fusarium solani* f.sp.phaseoli 1749.

Killer factor,

double-stranded RNA, biological control, *Endothia parasitica* virulence, blight,

Castanea dentata 8638.

Kitchens,

food, *Pseudomonas aeruginosa* isolation 5347.

surfaces, disease spread, *Campylobacter*, poultry 8429.

Klebsiella,

airborne microorganisms analysis, trains bathrooms 579.

antibacterial activity, apalacillin 4840.

antibacterial activity, fludalanine+penitidone 6454.

antibacterial agents, inhibition, reptization 4751.

antibiotic resistance, cross-resistance, cephalosporins, penicillins 7352.

clinical isolates, antibacterial activity, bactericidal activity, dibekacin,

gentamicin, tobramycin 6540.

clinical isolates, antibiotic resistance, R factors 5709.

clinical isolates, antibiotic resistance, relationship urease, phosphatase,

production 4709.

epidemiology, antibiotic resistance, serotyping 445.

identification, AutoMicrob test 1645.

β -lactamase, antibiotic resistance, antibacterial activity, cefotiam 4711.

netilmicin sensitivity 6401.

nitrogen fixation, foliar applications, yield, crops 2973.

polysaccharides, side chains 1828.

polysaccharides structure 1830.

polysaccharides structure 4367.

serotyping, antigen O, latex agglutination 9320.

Klebsiella aerogenes,

antibacterial activity, amoxicillin+clavulanic acid 4839.

antibacterial activity, ampicillin+sulbactam 4843.

capsules polymers binding heavy metals, activated sludge 6679.

catabolism pathway, evolution, enzymes activity, reviews 7821

membrane proteins, oxalacetate decarboxylase subunits composition,

characterization α -chains transferase activity 1791.

pullulanase, immobilized enzymes, starch processing 111.

Klebsiella oxytoca,

slimes, spoilage, milk 6176.

xylose conversion, 2,3-butanediol production 5262.

Klebsiella planticola,

nitrogen fixation, bark, *Bruguiera gymnorhiza* 2098.

Klebsiella pneumoniae,

acetyl-CoA acetyltransferase, activity, bioassays, characterization 8612.

antibacterial activity, β -lactam antibiotics, antibiotic antagonism,

chloramphenicol 4806.

antibacterial activity, antibiotic K-4619 7479.

antibacterial activity, aztreonam, antibiotic synergism 6504.

antibacterial activity, mezlocillin, piperacillin, azlocillin 7431.

antibacterial activity, structure-activity relationships, analgesics, 1-oxacephem,

1-thiacephem 4824.

antibacterial activity, WIN 49375 9091.

antibiotic resistance, plasmids, conjugation, *Serratia marcescens* 4716.

Klebsiella pneumoniae, (continued)

antibiotic synergism antibacterial activity, β -lactam antibiotics+amikacin

1391.

antibiotic synergism, sisomicin, +mezlocillin, +azlocillin 2271.

antibiotics antibacterial activity determination, counting methods 2239.

bactericidal activity, povidone-iodine 452.

2,3-butanediol production 5274.

2,3-butanediol production, aeration, glucose nutrient concentrations 3547.

2,3-butanediol production, pentoses conversion 3597.

2,3-butanediol production, sugars utilization, hydrogen fluoride, hydrolysis,

wood, *Populus tremuloides* 8632.

capsules, polysaccharides, carbohydrate composition, antigens 4361.

cephalothin antibiotic sensitivity testing, quality control 4828.

chloramines disinfection, pH effects on 9246.

clinical isolates, azlocillin antibiotic resistance 5715.

clinical isolates, drug resistance, R factors 3999.

coliforms indicator species, identification, incidence, water temperature

relationship, lakes 557.

cyclomaltodextrin glucanotransferase, use, preparation, cyclooctaamylose,

methodology 6753.

enzymes, use production, guanosine diphosphate-L-ucose 6061.

feeds contamination, chickens 7009.

fermentation, wood hydrolysates, 2,3-butanediol, butanol, production 5220.

gallic acid production, biodegradation, tannins, *Caesalpinia spinosa* 5106.

growth, endotoxins production, lipids emulsions 1946.

mutants, nitrogenase, molybdenum-iron protein, recombination, gene expression,

E.S.R. 3413.

nitrogen fixation, genes, gene expression, *Azotobacter vinelandii* 1280.

nitrogenase, kinetics 19.

nitrogenase, molybdenum iron proteins, cofactors, C.D. 5141.

nitrogenase mutants, iron protein, molybdenum-iron protein, nitrogen fixation,

acetylene reduction 2612.

nitrogenase, sodium bisulfite reduction 903.

nitrogenase, substrates reduction, nitrogen fixation, models 2609.

norfloxacin drug sensitivity testing 9095.

nutrition, wood decay 4423.

osmotic stress, inhibition, nitrogen fixation, glycine betaine, enhancement,

nitrogenase, biosynthesis 6334.

serum bactericidal activity, aztreonam, \pm cefoperazone, \pm amikacin 8344.

why fermentation, 2,3-butylene glycol production 2643.

Kloekera saturnus,

methyl-2-methyl-3-(2-furyl)-3-oxopropionate reduction,

methyl-2-methyl-3-(2-furyl)-3-hydroxypropionate production 4399.

Klrocin,

disease control, stalk rot, *Erwinia chrysanthemi*, Zea mays, tissues persistence

8929.

Kluyvera citrophila,

penicillin amidase, synthesis penicillins, cephalosporins 505.

Kluyvera noncitrophila,

immobilized cells, organic acids production, fermentation rates, supports effects

on 5301.

Kluyveromyces

immobilized cells, ethanol fermentation 2689.

Kluyveromyces fragilis,

biomass, association, ethanol production, whey+molasses substrates, aerobic

conditions 1069.

dairy starters, whey, characterization 3717.

ethanol fermentation, use, lactose, bioreactors 1869.

ethanol production, fermentation, tubers, *Helianthus tuberosus* 5297.

fermentation, com, \pm whey, production, ethanol, proteins feeds 982.

β -D-galactosidase activity, assays, dairy industry 5172.

immobilized cells, ethanol, fermentation, whey 2884.

immobilized cells, ethanol production, bioreactors 3634.

inulinase, association, β -D-galactosidase, production, batch culture,

continuous culture 7745.

inulinase, immobilized enzymes, inulin hydrolysis, fructose production 8548.

lactose, fermentation, ethanol, bioreactors 3590.

lactose fermentation, ethanol production 5289.

single-cell protein production, whey fermentation 1723.

single-cell protein, whey fermentation 1720.

use, ejector-foam fermenter, characterization 1867.

why fermentation, ethanol production, continuous culture 3604.

Kluyveromyces lactis,

caseinolytic enzymes, pH effects on 22.

peat hydrolysates, fermentation, ethanol production 6930.

Kluyveromyces marxianus,

antibiotic biosynthesis kinetics 3636.

ethanol production, whey permeate fermentation 8669.

immobilized cells, *Helianthus tuberosus* fermentation, ethanol production 3640.

immobilized cells, whey, lactose fermentation, ethanol production 1864.

inulin fermentation, ethanol production, stalks, *Helianthus tuberosus* 5298.

temperature effects on ethanol production 3588.

Kocide 101,

antifungal activity, *Macrophoma mangifera* 4587.

Koji,

glutaminase, aminopeptidase (cytosol), assays, use L-glutamate oxidase,

Aspergillus oryzae 7853.

molds, soy sauce, spores inoculum production 196.

Kuwait,

leather, fungi, biodegradation, museums 1024.

Kyllinga triceps,

Sorosporium apparai sp.nov. smut, India 2035.

La Crosse virus,

antigens, enzyme immunoassay, *Aedes triseriatus* 609.

indirect fluorescent antibody test, immunodiagnosis 596.

infection, diagnosis, use, immunoglobulin M, immunoassays, man 3237.

Labeling,

kanamycin, enzyme immunoassay 3109.

methodology, immunochimistry, *Bacteroides nodosus* pili 7624.

monoclonal antibodies, methodology, detection, *Chlamydia trachomatis* inclusion

cells 3337.

Laboratories,

clinical microbiology, Norway, antibiotic sensitivity testing quality control

bacteriostats, (continued)

4040.
design, disease control, pathogens 1523.
nematation, mathematical models correction 2676.
infection, hepatitis B, tuberculosis, shigellosis, man 2414.
methodology, Mycoplasma, books, morphology, ultrastructure, cell culture, identification 3377.
mycobacterium, quality control 3072.
occupational hazards, bacteria manipulation, safety instruments 5872.
ethogens, disease transmission, disease control, occupational hazards 1522.
inert animals,
isolate isolates, *Campylobacter jejuni*, antibiotic sensitivity testing 9180.
in vitro 25,
antibacterial activity, *Streptomyces* soil isolates 4737.
variant, actinomycetes enumeration, forests soil 4674.
insects,
seedlings inoculation, roots colonization, spatial distribution, soil, *Betula* 5556.
insects *amethystina*,
inoculation, growth stimulation, *Picea sitchensis* 5565.
insects *laccata*,
antagonism, rhizosphere actinomycetes, *Eucalyptus marginata*, *Pinus radiata* 2099.
insects *mycorrhizas*, aromatic compounds, biological control, root rot, *Fusarium oxysporum*, *Pseudotsuga menziesii* 5562.
inoculation, growth stimulation, *Picea sitchensis* 5565.
insects *proxima*,
actinomycetes, mycelia, inoculation, seedlings, *Pinus banksiana* 7227.
insects *mycorrhizas*, 2-methoxy-1,4-benzoquinone biosynthesis, vanillic acid metabolism, fungi 8644.
aromatic compounds oxidation, *Fusarium* 5977.
intracellular, biosynthesis, fungi 8587.
isolation, molecular weight, redox potential, isoelectric points, *Polyporus anisoporus* 7122.
localization, *Ophrys lutea*, endomycorrhizas, *Rhizoctonia* depends 380.
insects *B*,
purification, characterization, *Lactobacillus acidophilus* 9203.
insects *stam*,
analogs, peptide synthesis, toxins, *Alternaria* man 3736.
insects *antibiotics*,
alanine carboxypeptidase, zinc containing, active sites inhibition, *Streptomyces albus* 5985.
-amikacin, antibiotic synergism, antibacterial activity 1391.
-amikacin, antibiotic synergism, antibacterial activity, Enterobacteriaceae 9165.
-aminoglycoside antibiotics, antibiotic synergism, *Pseudomonas aeruginosa* 4807.
-aminoglycoside antibiotics, inactivation, detection, enzyme immunoassay 4861.
analogs, peptide synthesis 4867.
analogs, 2-alkylthiocarbonyl-2-em-3-carboxylate synthesis 3117.
antagonism, cefoxitin antibacterial activity, reviews 507.
antibacterial activity 1431.
antibacterial activity, antibiotic sensitivity testing, use hypersensitivity mutants, bacteria 6496.
antibacterial activity, *Bacteroides fragilis*, clavulanic acid effects on 6499.
antibacterial activity, D-amino acids inhibition, *Escherichia coli* 9064.
antibacterial activity determination, counting methods 2239.
antibacterial activity, Enterobacteriaceae 4809.
antibacterial activity, gram-negative bacteria, + β -lactamase inhibitors 6505.
antibacterial activity, methicillin antibiotic resistance *Staphylococcus aureus*, in vitro 7343.
antibacterial activity, *Pseudomonas aeruginosa*, empyema clinical isolates 497.
antibacterial activity, *Staphylococcus intermedius*, agar diffusion test, + β -lactamase effects on 9157.
antibacterial activity, antibiotic synergism, aminoglycoside antibiotics, *Pseudomonas aeruginosa* 7403.
antibiotic antagonism, chloramphenicol, antibacterial activity, *Klebsiella pneumoniae* 4806.
antibiotic PS-5, synthesis 9212.
antibiotic resistance, + β -lactamase, bacteria, reviews 9050.
antibiotic resistance, + β -lactamase, gram-negative bacteria, reviews 3036.
antibiotic resistance, + β -lactamase, *Pseudomonas aeruginosa* 9082.
antibiotic resistance, bacteria, + β -lactamase role, reviews 438.
antibiotic resistance, cross-resistance, aminoglycoside antibiotics, clinical isolates, *Serratia marcescens* 4687.
antibiotic resistance, *Haemophilus influenzae* type b, clinical isolates, characterization 6407.
antibiotic resistance, lipopolysaccharides structure, membrane permeability, *Pseudomonas aeruginosa* 7349.
antibiotic resistance, membrane permeability, *Pseudomonas aeruginosa* 9081.
antibiotic resistance, penicillin-binding protein characterization, clinical isolates, *Streptococcus viridans* 428.
antibiotic sensitivity testing 3069.
antibiotic sensitivity testing, *Bacteroides* 9159.
antibiotic sensitivity testing, *Eikenella corrodens* 4793.
antibiotic sensitivity testing, inoculum size effects on, *Neisseria gonorrhoeae* 7426.
antibiotic sensitivity testing, *Pseudomonas aeruginosa* 4801.
antibiotic sensitivity testing, *Streptococcus pneumoniae* 6503.
antibiotic synergism, aminoglycoside antibiotics, antibiotic sensitivity testing, *Pseudomonas aeruginosa* 7417.
antibiotic synergism, temocillin, antibacterial activity, Enterobacteriaceae, *Pseudomonas aeruginosa*, *Staphylococcus aureus* 3122.
antibiotics sensitivity testing, *Bacteroides fragilis*, infection, epidemiology, men 7409.
antibacterial activity, gram-negative bacilli 3156.
binding D-alanyl-carboxypeptidase-transpeptidase, X-ray crystallography, *Streptomyces* 3457.
comparison, cefmetazole, antibacterial activity, *Staphylococcus aureus*, lipoteichoic acid, release 1393.
control, *Xanthomonas campestris* pv. *malvacearum*, blight, *Gossypium hirsutum* 6315.
demonstration, reviews 5760.
hydrolysis, + β -lactamase, *Bacillus licheniformis* 4689.
intermediates, synthesis, association, L-(S)-glyceraldehyde acetonide, stereo selectivity 3173.
orthiazolidinone conversion, penicillin biosynthesis models 6530.
-oxy-3-amino-2-azetidinone synthesis, antibacterial activity, gram-negative

 β -Lactam antibiotics, (continued)

- bacteria 9206.
peptide bonds synthesis, use immobilized enzymes 4796.
3-phenylthiopropionamide conversion, models, penicillin biosynthesis 6529.
resistance, + β -lactamase activity, bacteria 4702.
resistance, + β -lactamase activity, bacteria 4703.
resistance, Enterobacteriaceae, relationship, + β -lactamase production 9078.
resistance, penicillin-binding protein affinity role, *Staphylococcus aureus* 5712.
stability, N-methylthioletrazole side chains 8343.
Streptococcus group B susceptibility 1391.
structure, role, + β -lactamase stability 4325.
structure, X-ray crystallography, computer graphics 7462.
synthesis 6582.
synthesis 7458.
synthesis, books 6796.
synthesis, immobilized enzymes 4795.
synthesis, L-aspartic acid, oxidation, racemization 9205.
synthesis, peptides conversion 6581.
synthesis, use, N-trimethylsilyl imines 9208.
synthesis, use ultrasound 7406.
tolerance, *Staphylococcus aureus* 6418.
Lactamase,
activity, + β -lactam antibiotics resistance, bacteria 4702.
activity, + β -lactam antibiotics resistance, bacteria 4703.
activity, ampicillin resistance, Enterobacteriaceae 4704.
activity, *Bacteroides fragilis*, antibiotic sensitivity testing 7407.
activity, carbapenem, *Pseudomonas aeruginosa* clinical isolates 7345.
activity measurements, benzylpenicillin spin 6827.
antibiotic resistance, + β -lactam antibiotics, bacteria, reviews 9050.
antibiotic resistance, + β -lactam antibiotics, *Pseudomonas aeruginosa* 9082.
antibiotic resistance, cefotiam, antibacterial activity, Enterobacter, *Klebsiella* 4711.
antibiotic resistance, cephalosporins, *Proteus vulgaris* 2194.
antibiotic resistance, moxalactam, *Serratia marcescens* 3038.
antibiotic sensitivity testing, clinical isolates, *Branhamella catarrhatis* testing 3092.
antibodies deactivation, guinaicillin, cephaloridine substrates, *Staphylococcus aureus* 5156.
association, antibiotic resistance, penicillin, *Streptococcus faecalis*, clinical isolates 7325.
Bacillus cereus, inhibition, cis-platinum diamminodichloride, 6-methyl-pyrid-2-yl-amine palladium-dichloride 1754.
Bacillus, gene expression, *Escherichia coli* plasmid pCAP 894.
Bacillus licheniformis, plasmid pLP11 transformation, gene expression, stability, antibiotic resistance effects on, *Bacillus stearothermophilus* 8543.
Bacteroides fragilis, purification, characterization 879.
binding affinity, N-formimidoyl thienamycin 4275.
biosynthesis, inducers, correlation, penicillins, antibacterial activity, Enterobacteriaceae 2261.
biosynthesis, *Neisseria gonorrhoeae*, detection, methodology 30.
carbapenem hydrolysis, *Pseudomonas aeruginosa*, *Proteus mirabilis* 2619.
cefoxitin stability 1394.
cefpirimide, inhibition, *Pseudomonas aeruginosa*, antibacterial activity 4830.
Citrobacter plasmids gene products, purification, characterization 26.
clavulanic acid inhibition, antibiotic resistance, cephalosporins, *Bacteroides fragilis* 3019.
deficient mutant, amoxicillin production, *Pseudomonas melanogena* 3104.
detection, assays, clinical isolates, gram-negative bacteria, gram-positive bacteria 6884.
effects on + β -lactam antibiotics antibacterial activity, agar diffusion test, *Staphylococcus intermedius* 9157.
Enterobacter cloacae, *Citrobacter freundii*, inhibition, temocillin, cefoxitin, structure-activity relationships 5120.
Escherichia coli, biosynthesis, excretion, envelopes defective mutant 2601.
fluorescence, detection, methodology 7627.
Francisella tularensis, purification, characterization 1814.
gram-negative bacteria, antibiotic resistance, + β -lactam antibiotics, reviews 3036.
gram-negative bacteria, clindamycin effects on derepression 515.
Haemophilus influenzae, detection methodology, cerebrospinal fluid, man 1643.
Haemophilus paraphrophilus, detection, quality control, clinical microbiology 4688.
hydrolysis, (D,L)-7-(α -fluoroacetyl)aminocephalosporanic acids, antibiotic resistance, penicillins, cephalosporins, kinetics, *Bacillus cereus* 4279.
hydrolysis substrates, pH, deuterium oxide effects on, kinetics, *Bacillus cereus* 4276.
impempen, inhibition, *Proteus vulgaris* 2317.
indicators, pyridine-2-azo- β -dimethylamine cephalosporin, gram-negative bacteria, clinical microbiology 501.
inhibition, benzylpenicillin, meclizine, derivatives, penams, (2,3)- β -methylene-penam 6532.
inhibition, Enterobacter cloacae 6-aminopenicillanic acid, new records 2263.
inhibition, clavulanic acid + amoxicillin, antibacterial activity, antibiotic resistance, clinical isolates, gram-negative bacteria, gram-positive bacteria 7438.
inhibitors, + β -lactam antibiotics, antibacterial activity, gram-negative bacteria 6505.
inhibitors, clavulanic acid, sulbactam, quinacillin sulfone, antibiotic MM13902, antibiotic MM4550, gram-negative bacteria 9161.
inhibitors, production, *Micromonospora*, Streptovermicin, screening 3082.
interaction oxyimino-cephalosporins, structure-activity relationships, *Escherichia coli* 6832.
+ β -lactam antibiotics hydrolysis, *Bacillus licheniformis* 4689.
levels, *Staphylococcus aureus*, levels relationship, antibiotic resistance, heavy metals resistance 2203.
plasmids, antibiotic resistance, Enterobacteriaceae 8290.
production, clinical isolates, colorimetry, cephalosporins 487.
production, Enterobacteriaceae, relationship, + β -lactam antibiotics resistance 9078.
production, facultative bacteria, role, *Bacteroides melanogena* protection, penicillin antibacterial activity 5775.
production, media (culture), *Neisseria gonorrhoeae* 718.
production, penicillin antibiotic resistance, oral cavity clinical isolates 7334.
production relationship, bacteria detection methodology 3286.
production relationship, *Neisseria gonorrhoeae* drug sensitivity testing 1377.

β -Lactamase, (continued)

- production, *Staphylococcus aureus*, antibacterial activity, penicillins 4842.
production, *Staphylococcus*, clinical isolates, screening, media (culture), methodology 3350.
Pseudomonas aeruginosa, association, antibiotic resistance, piperacillin, ceftazidime, cefsulodin 4696.
Pseudomonas aeruginosa, detection, iodometry, micromethods 8562.
Pseudomonas maltophilia, purification, characterization 4285.
role antibiotic resistance, bacteria, infection, clinical aspects, reviews, man 3031.
role, antibiotic resistance, mezlocillin, *Staphylococcus aureus* 3008.
role moxalactam antibacterial activity, *Enterobacteriaceae* 5769.
stability, antibacterial activity, antibiotic FR 17027 7430.
stability, antibiotic HR 810, antibacterial activity, characterization 3100.
stability, role β -lactam antibiotics structure 4325.
Staphylococcus, biosynthesis, clinical isolates comparison 1813.
6- β -(trifluoromethane sulfonyl)-amido-penicillanic acid sulfone, derivatives, inactivation, *Bacillus cereus* 1780.
X-ray crystallography, *Enterobacter cloacae* 1760.
- Lactarius necator**,
necatorin stability 7904.
- Lactarius pubescens**,
ectomycorrhizas, *Betula pubescens*, spreading, colonization, seedlings, *Betula pendula* 5558.
- Lactarius trivialis**,
water sorption assays 1905.
- Lactate dehydrogenase**,
purification, kinetics, thermal stability, *Thermus caldophilus* 68.
pyruvic acid reduction, kinetics, *Phycomyces blakesleeanus* 2620.
- D-Lactate dehydrogenase**,
production, *Lactobacillus confusus* 31.
- Lactate oxidase**,
purification, immobilization, lactic acid bioassays, *Acetobacter peroxydans* 3447.
- Lactate 2-monooxygenase**,
immobilization, use serum L-lactic acid analysis 7748.
- Lactic acid**,
bioassays, lactate oxidase, immobilization, *Acetobacter peroxydans* 3447.
fermentation, immobilized cells, *Lactobacillus delbrueckii*, *Lactobacillus bulgaricus* 8.
fermentation, kinetics, yield, *Streptococcus faecium* 6818.
fermentation, microorganisms growth association, kinetics mathematical models 2530.
Lactobacillus cellobiosus, sugars fermentation, beans, juices, Glycine max 5316.
lactic acid, genetic, *Lactobacillus delbrueckii*, cloning, *Escherichia coli*, *Saccharomyces cerevisiae*, role, wine, fermentation 2681.
production, animal wastes mixed culture inoculum 10.
production, dairy starters, *Streptococcus lactis*, *Streptococcus cremoris*, proteinase deficiency, temperature tolerance 2732.
production, glucose fermentation, reactors, *Lactobacillus delbrueckii* 864.
production, growth, measuring techniques, dairy products, *Streptococcus cremoris* 7867.
stereospecificity, enantiomers production, use 2-haloacid dehalogenase 8517.
- L-Lactic acid**,
serum, analysis, use lactate 2-monooxygenase immobilization 7748.
- Lactic acid bacteria**,
acid production, silage fermentation, *Zea mays* 7873.
antagonism, intestinal microflora, colibacillosis prevention, chickens 1064.
antagonism, *Staphylococcus aureus* disinfection, hospitals 3227.
antibacterial activity, herbs 4723.
antimicrobial activity, flavorings 9143.
+*Bacillus*, *Corynebacterium*, retting, organoleptic evaluation, fermented food, cassava 3688.
cocoa fermentation 5323.
coffee fermentation 5324.
com meals fermentation, vitamins levels 5356.
dairy starters, acid production, strains synergism, cheese 7866.
dairy starters, amines levels, milk 6962.
dairy starters, cost-benefit analysis 4464.
dairy starters, counting methods, ATP assays, milk, yogurt 6996.
dairy starters, fermentation, continuous culture, milk, yogurt production 6997.
dairy starters, fermented milk products, microorganisms 5329.
dairy starters, genetic engineering 3696.
dairy starters, preservation, freeze drying 1612.
dairy starters, proteolytic enzymes 5346.
dairy starters, protoplasts production, use transformation 5952.
dairy starters, reviews 8710.
dairy starters, temperature tolerance, acid production 6187.
dairy starters, yogurt, lactose utilization, man 4452.
detection, enumeration, methodology, fermented milk products 1062.
fermentation, alcoholic beverages 5273.
fermentation, amino acids, temperature effects on, cornmeal 7881.
fermentation, cheese 3693.
fermentation, cucumbers, cabbage 5330.
fermentation, ethanol, wine, brandy 5279.
fermentation, juices proteins, *Medicago sativa* 3722.
fermentation, meals, soybeans + corn, effects on nutritive value, minerals 5355.
fermentation, meals, soybeans + corn, effects on amino acid composition 5357.
fermentation, production, ethanol, acetic acid, acetoin, 2,3-butylene glycol 5240.
fermentation, silage 7013.
fermentation, silage, animal wastes, use feeds, nutritive value, pigs 7019.
fermentation, wine, *Phoenix dactylifera* 5288.
fermentation, 6-phytase, phosphorus release, com 6977.
fermented food, olives 5331.
fermented milk products 4447.
four fermentation, sugars, gas chromatography, Uji, fermented food 3692.
food contamination, meat, meat products, reviews 209.
growth, physiology, 2,4-dichlorophenoxyacetic acid effects on 6184.
identification methodology, sugars fermentation 4198.
inoculation, fermentation, silage, *Zea mays* 7876.
inoculum, silage 7012.
kefir production, organoleptic evaluation 1055.
malic acid metabolism 6200.
malolactic fermentation, wine production, reviews 173.
Medicago sativa fermentation, effects on 3723.
multiplication, ultrastructure, electron microscopy, grain contamination 2742.

Lactic acid bacteria, (continued)

- proteolytic enzymes characterization, role, milk products production, reviews 96.
proteolytic enzymes, cheese production, aflatoxin B1 effects on 8730.
role, production, fermented food, reviews 211.
spoilage, beer 1872.
starter cultures, inhibition *Clostridium botulinum* growth, packaging, films, oxygen permeability, luncheon meat 7023.
starter cultures, meat products 6961.
starter cultures, quark production, organoleptic properties 1054.
Streptococcus, antibiotic resistance, phosphate, buffers, media (culture), effects on 5708.
sugars fermentation, juices, beans, Glycine max 6980.
taxonomy (numerical), meat, vacuum packaging 4446.
+ yeasts, mixed culture, fermentation, vegetables 7871.
yogurt production, mathematical models 6190.
- Lactobacillus**,
amylase biosynthesis, chickens crop isolates 1815.
antibacterial activity, *Streptococcus cremoris* bacteriocins, role dairy starters 2311.
cervical microflora, biochemical characteristics, identification, methodology 781.
cheese production, skim-milk, powder, milkfat 4460.
dental plaque, prophylaxis, sodium fluoride topical application, cancer patients 6730.
glucose isomerase, production, characterization 2618.
oral administration, inhibition coliforms, intestinal microflora, growth, chickens 2751.
packaging, organoleptic evaluation, vacuum packaging, nitrogen packaging, veal 5363.
plasmids isolation methodology 4170.
proteolytic enzymes characterization, role, milk products production, reviews 96.
Saccharum officinale fermentation, ammonia effects on 2754.
spoilage, vacuum packaging, nitrogen packaging, luncheon meat 8715.
starter cultures, sausages 1900.
- Lactobacillus acidophilus**,
amylase biosynthesis, chickens crop isolates 1815.
+ antibiotics, oral administration, biotin nutrient availability, intestinal microflora, chickens 2750.
biomass harvesting, use filtration, cell aggregation 6802.
dairy starters, fatty acids, lipids, biosynthesis, fermentation, milk 7865.
fermentation, silage 7013.
 α -D-glucosidase, biosynthesis, physicochemical properties 98.
inoculum, silage 7012.
lactacin B, purification, characterization 9203.
peptide antibiotics, purification, characterization 4790.
plasmids isolation methodology 4170.
use, ice cream production 6198.
- Lactobacillus brevis**,
fermentation, vegetables, dialysis, continuous culture 2740.
media (isolation) detection, spoilage, beer 4414.
- Lactobacillus buchneri**,
malic acid metabolism, silage 6200.
- Lactobacillus bulgaricus**,
antibiotic resistance, plasmids 2202.
dairy starters, acid production, temperature tolerance 6187.
dairy starters, counting methods, ATP assays, milk, yogurt 6996.
dairy starters, fatty acids, lipids, biosynthesis, fermentation, milk 7865.
dairy starters, milk phosphate effects on phages contamination 3716.
dairy starters, yogurt, milk, buffaloes 6969.
immobilized cells, lactic acid, fermentation 8.
media (isolation), yogurt 7006.
plasmids isolation methodology 4170.
survival, freezing, freeze drying, calcium effects on 4457.
yogurt, fermented milk products, feed efficiency, rats 7011.
- Lactobacillus casei**,
acetolactate decarboxylase, use, yeasts brewing, beer maturation 7800.
adenosinetriphosphatase, molecular weight, subunits activity, N,N-dicyclohexylcarbodiimide inhibition 2589.
antibacterial activity, dihydrolic acid analogs, synthesis 6447.
bioassays, methotrexate measuring techniques 2472.
fermentation, cheese 3693.
lysozyme, purification, characterization, phage PL-1 induction 4284.
malic acid metabolism, silage 6200.
tetrahydrofolate dehydrogenase immobilization, use 5,6,7,8-tetrahydrofolate preparation 8575.
tetrahydrofolate dehydrogenase inhibition, X-ray diffraction, mathematical models 4323.
transformation, plasmid pLZ84, genes, 6-phospho- β -D-galactosidase, lactose metabolism 5345.
- Lactobacillus casei subsp. lactosus**,
mutagenesis, nitrosguanidine, genetic engineering, soybean milk flavor compounds 3701.
- Lactobacillus cellobiosus**,
fermentation, *Phaseolus vulgaris* beans, mannitol biodegradation, *Lactobacillus plantarum* 7003.
malic acid metabolism, silage 6200.
spoilage, vacuum packaging, films, oxygen permeability, mutton 5362.
sugars fermentation, juices, beans, Glycine max 6980.
sugars fermentation, lactic acid, beans, juices, Glycine max 5316.
- Lactobacillus confusus**,
D-lactate dehydrogenase production 31.
- Lactobacillus cremoris**,
dairy starters, continuous culture, milk fermentation, yogurt production 6997.
- Lactobacillus delbrueckii**,
glucose fermentation, lactic acid production, reactors 864.
- Lactobacillus delbrueckii**,
immobilized cells, lactic acid, fermentation 8.
malic acid, lactic acid, genes, cloning, *Escherichia coli*, *Saccharomyces cerevisiae*, role, wine, fermentation 2681.
- Lactobacillus fructivorans**,
enumeration, oranges juices frozen products 7850.
- Lactobacillus helveticus**,
antibiotic resistance, plasmids 2202.
dairy starters, acid production, temperature tolerance 6187.
 β -D-galactosidase, purification, characterization 6848.
plasmids isolation methodology 4170.

Larvae, (continued)

- Culex pipiens*, biological control, *Bacillus sphaericus*, sporulation, relationship, toxicity 6069.
 Culicidae, bioassays, biological control efficacy, *Bacillus thuringiensis* 6083.
 Culicidae, biological control, spore crystals, *Bacillus sphaericus* 6917.
 digestive tract, *Culicoides mycetes clavisporus* infection, ultrastructure, histopathology, biological control, *Anopheles* 2653.
 growth, t-2 toxin bioassays, *Maestrea confingata* 3731.
Heliothis armigera, mortality, nuclear polyhedrosis virus, bioassays, use biological control 967.
 Hypera postica, biological control, toxicity, bioassays, exotoxins, *Bacillus thuringiensis* 8641.
 Indarbeta quadrinotata, biological control, *Beauveria bassiana* 6081.
 molting, inhibition, L-alanine, growth regulators, *Streptomyces*, *Leucania separata* 7774.
 mortality, *Bacillus thuringiensis* exotoxins, *Achaea janata* 1852.
 Neodiprion sertifer, biological control, nuclear polyhedrosis virus 6093.
 Spodoptera littoralis, biological control, pathogens effects on hemolymph amino acids, *Bacillus thuringiensis* 6912.
 Spodoptera littoralis, *Bacteria* seimela, biological control, use, *Bacillus thuringiensis* endotoxins 118.
 Spodoptera littoralis, predator-prey interactions, biological control effects on, *Bacillus thuringiensis* 8643.
 toxicity, peptide antibiotics, comparison *Bacillus thuringiensis* toxins, *Aedes aegypti* 2661.

Leucisides

- activity, *Bacillus sphaericus* media (culture), growth, sporulation 127.
Bacillus thuringiensis subsp. *israelensis*, *Haematobia irritans*, biological control 5209.
 Culicidae, *Streptopogon* album aculeximycin, fermentation, isolation 2293.
 pathogens, biological control, *Bacillus sphaericus*, *Bacillus thuringiensis*, *Toxophrynes*, Culicidae 1841.

Leuca

- chemical analysis, fungi, methodology 4226.
 nephelometry, bacteriuria diagnosis, man 5040.

Lesiodiplodia

- fruit rot, pathogenicity 7162.

Leistanox

- effects on growth, soil microorganisms 8259.

Life blight

- Phytophthora infestans, disease control, fungicides, foliar applications, *Solanum tuberosum* 8915.
 Phytophthora infestans, disease control, fungicides, *Lycopersicon esculentum* 1206.
 Phytophthora infestans, disease control, metalaxyl, mancozeb, *Solanum tuberosum* 8926.
 Phytophthora infestans, fungicides disease control, *Solanum tuberosum* 1214.
 Phytophthora infestans, pathogenicity, oospores production, induction, *Phytophthora drechsleri*, *Solanum tuberosum* 8034.
 Phytophthora infestans, *Solanum tuberosum*, pathogens, ultrastructure 3837.
Solanum tuberosum, *Phytophthora infestans*, disease control, use, olfucose controlled-release granules 2887.

Latex

- levels, vesicular-arbuscular mycorrhizas inoculation stimulation, *Parthenium argentatum* 5622.
Latex agglutination, antigen O, serotyping, Klebsiella 9320.
 characterization, immune status, rubella virus, man, methodology 635.
 comparison, phagebact test, detection, *Haemophilus influenzae* type b, antigens, cerebrospinal fluid 795.
 detection, antigens, plant viruses, *Oryza sativa* 5416.
 diagnosis, *Legionnaires* disease, man 7622.
 diagnosis, *Streptococcus pneumoniae* infection, comparison counter immunoelectrophoresis 5028.
 diagnosis, throat infection, *Streptococcus* group A 693.
 flaccid virus detection, *Bombyx mori* 4161.
 identification, clinical isolates, *Staphylococcus aureus* 2502.
 identification, *Staphylococcus aureus* 5390.
 identification, *Staphylococcus aureus* clinical isolates 685.
 +media (selective), detection, identification, *Streptococcus* group B 1609.
 methodology, rubella virus antibodies detection, serum, man 1539.
 rubella virus antibodies detection, methodology comparison 1540.
Streptococcus group B identification, carbohydrates monoclonal antibodies analysis 1629.
 use, *Haemophilus influenzae*, comparison, *Streptococcus pneumoniae*, *Neisseria meningitidis*, detection, antigens, body fluids, man 3310.
 use, horses erythrocytes sialoglycoproteins, detection, Epstein-Barr virus p anti-Burkitt antibody 1583.

Leuconine

- biodegradation, oxidation, *Pseudomonas putida* 2715.

Laundry

- recovery, *Escherichia coli*, *Staphylococcus aureus*, methodology 5859.
 washing, bacteria enumeration, hospitals 3226.

Lauridin

- antibacterial activity, Tween 20, Tween 80, neutralization 7356.

Lauryl pyridinium iodide

- adsorption, *Escherichia coli*, bacteriostasis 2218.

Leachates

- activated sludge, humic acid biodegradation, γ radiation treatment 1489.
 landfills, wastewater treatment, digestion (aerobic), lagoons 7516.
 wastewater treatment, industrial wastes, land disposal 4920.

Leaching

- biocumulation, metals, reviews, microorganisms 5692.
 cobaltous sulfide, iron(II) role, *Thiobacillus ferrooxidans* 9030.
 copper, industrial wastes, *Thiobacillus ferrooxidans*, *Leptospirillum ferrooxidans*, *Sulfobacillus thermosulfidoxidans* 7301.
 effects on soil microorganisms decomposition, straw, *Hordeum vulgare* 2942.
 metals, biotechnology, microorganisms 6393.
 Minerals, use, microorganisms, methodology, reviews 8263.
 mining, iron(III) oxidation, pyrite, iron-oxidizing bacteria 5689.
 sulfur, coal, *Thiobacillus* 3976.
 sulfur, coal, *Thiobacillus ferrooxidans* 3974.
 use, microorganisms, reviews, books 5093.

Lead

- inhibition, ectomycorrhizas, roots colonization, *Picea sitchensis* 8168.

Lead, (continued)

- sensitivity, soil microorganisms 1261.

Leaf blight

- Alternaria alternata*, *Datura innoxia*, tenuazonic acid isolation, association, characterization 5394.
Alternaria carthami, *Carthamus tinctorius*, factors affecting 5449.
Alternaria carthamea, disease resistance, plant breeding, *Carthamus tinctorius* 5296.
Alternaria solani, *Streptomyces griseus* interaction, *Capsicum annuum* 2007.
Asplenium nidus, etiology, *Pseudomonas gladioli* 4563.
Cochliobolus heterostrophus, *Albi* gene, *Cyl* gene, mat gene, relationship, epidemics, *Zea mays* 3805.
Cochliobolus heterostrophus, population studies, auxotrophs, *Zea mays* 1981.
Corynespora cassicola, India, *Carica papaya* 6204.
Pseudomonas viridiflava, *Lycopersicon esculentum*, etiology 4561.
Xanthomonas campestris var. *oryzae*, disease resistance, mutagenesis, *Oryza sativa* 5475.

Leaf blotch

- Alternaria alternata*, *Aspergillus varicolor* biological control, *Hordeum vulgare* 2093.
Hordeum vulgare, triadimenol sensitivity, *Rhynchosporium secalis* 5530.
Rhynchosporium secalis, barley yellow dwarf virus effects on disease resistance *Hordeum vulgare* 1196.
 Septoria tritici, pathogenesis, *Triticum germplasm* analysis 257.
 Septoria tritici, *Triticum aestivum*, disease control, use, antitranspirants 291.

Leaf characters

- Vigna unguiculata*, relationship, nitrogen fixation, genotypes screening association 9000.

Leaf fall

- Pseudomonas syringae* pv. *berberidis* etiology, *Berberis*, British Isles 8873.
Leaf litter, bacteria, algae, levels, activity, phenamiphos, oxamyl, effects on 9025.
 colonization, decomposition, interspecific relationships, invertebrates, forest floor 7222.
 decomposition, bacteria, reservoirs, pollution effects, mines acids drainage 4429.
 decomposition, forests, Canada 8933.
 decomposition, nutrient cycles, soil microorganisms, plantations, *Coffea arabica* 5624.
 fungi biodegradation, pesticides effects on 2097.
 nitrogen fixation, *Azotobacter*, *Azospirillum*, *Saccharum officinale* 6353.
 Picea sitchensis, decomposition, *Myrica galopus*, *Marasmius androsaceus*, competition, *Orychilus* class grazing effects on 8940.

Leaf

- Limonium sinuatum*, etiology, *Pseudomonas caryophylli* 4560.

Leaf rust

- Coffea*, disease control, *Hemelia vastatrix*, cuprous oxide, cupric hydroxide 812.
 disease resistance, *Triticum aestivum*, genetic control 2054.
 fungi, effects on yield, disease resistance, genotypes, *Triticum aestivum* 8098.
Hemelia vastatrix, disease resistance characterization, *Coffea canephora* 305.
Hemelia vastatrix, disease resistance characterization, *Coffea* 305.
Hemelia vastatrix, disease resistance variation, *Coffea arabica* 304.
Hemelia vastatrix, genotype-environment interactions, host-pathogen interactions, disease resistance, plant breeding, *Coffea arabica*, *Coffea canephora* 2872.
Melampsora larici-populina, antagonism, *Cladosporium*, hybrids, *Populus* 361.
Melampsora medusae, *Populus*, disease resistance 2107.
Puccinia coronata, *Lolium*, disease resistance, cultivars 3874.
Puccinia hordei, disease resistance breeding, *Hordeum vulgare* 301.
Puccinia recondita, disease control, seed treatments, fungicides, *triticum aestivum* 2904.
Puccinia recondita, pathology, *Triticum aestivum* 7961.
Puccinia recondita f.sp. *tritici*, disease resistance, Lr 13 gene, genetic control, *Triticum aestivum* 8069.
Puccinia recondita f.sp. *tritici*, disease resistance, *Puccinia helianthi* induction, *Triticum aestivum* 293.
Puccinia recondita f.sp. *tritici*, *Puccinia recondita* f.sp. *secalis* disease resistance, inheritance, plant breeding, *Secale cereale* 8907.
Puccinia recondita f.sp. *tritici*, urediniospores, disease transmission, brome mosaic virus, *Triticum aestivum* 2789.
Puccinia recondita, *Triticum aestivum* seedlings, linkage analysis 258.
Puccinia sorghi, effects on carboxyl translocation, *Zea mays* 259.
Vicia faba, pathogenesis, *Uromyces viciae-fabae* urediniospores, nutrient requirements 5408.

Leaf scale

- Rhynchosporium oryzae*, *Oryza sativa*, disease resistance 5504.

Leaf spot

- Asplenium nidus*, etiology, *Pseudomonas gladioli* 4563.

Leaf streak

- Mycosphaerella fijensis*, disease resistance, plant breeding, *Plantago major* 8077.

Leaf-rot

- effects on yield, *Vitis vinifera* clones 8859.
 Rhizobium, *Cajanus cajan* 6232.

Leafspot

- Alternaria alternata*, *Cassia angustifolia*, *Cassia acutifolia*, new records, India 2040.
Alternaria alternata, *Catharanthus roseus* 8049.
Alternaria panax, *Brassica actinophylla*, *Dizygotea elegantissima*, *Tupidanthus calyptraus* 5450.
Alternaria scorzonerae, pathology, *Scorzonera hispanica* 8018.
Arachis hypogaea, disease control, *Cercospora arachidicola*, *Cercosporium personatum* 3793.
 Autographa eucalypti, *Eucalyptus* 5612.
 Bipolaris sorokiniana, *Triticum aestivum*, disease resistance 5492.
Carthamus tinctorius, *Alternaria carthami*, *Alternaria alternata*, pathology 1144.
Cercospora arachidicola, *Arachis*, disease resistance 5491.
Cercospora arachidicola, *Cercosporium personatum*, effects on, *Arachis hypogaea* 7934.
Cercospora arachidicola, pathogenesis, effects on growth, *Arachis hypogaea* 7945.
Cercospora canescens, pathogenesis, *Phaseolus mungo*, planting density, time effects on 7929.
Cercospora soja, *Glycine max*, disease resistance genes, Rcs gene 1172.
Cercosporium personatum, pathogenesis, effects on growth, *Arachis hypogaea* 7945.
Coccomyces himalis, *Prunus*, disease control, fungicides, new records 339.

aprot, (continued)

- Heliothium*, *Dioscorea alata*, factors affecting yield 4588.
Helicoverpa australiensis, symptoms, *Musa sapientum*, Egypt, new records 8002.
Helicoverpa sokriniana, *Poa pratensis*, herbicides soil applications effects on 3933.
Chomima crassipes 8818.
aeagnus angustifolia, *Septoria elaeagni*, epidemiology, etiology 7989.
xerophilum rostratum, *Chrysoidocarpus lutescens*, foliar applications, micronutrients, fungicides, effects on 3910.
Isarium fusaroides, *Punica granatum*, new records 2004.
Elianthus annuus, *Diaporthe helianthi* infection, USA, Texas 3839.
Solanum tuberosum, *Pseudomonas syringae* pv. *tagetes* infection 3849.
Elminthosporium carbonum, genotypes, *Zea mays*, effects on, fitness 7971.
Elminthosporium, *Drechslera*, incidence, cultivars mixed culture, *Hordeum vulgare* 2841.
calyptrochium maydis sp. nov., *Zea mays* 7993.
sphaerulina briosiana, *Medicago sativa*, disease resistance, screening 8087.
acrothoma zaei, Hungary, *Zea mays* 7969.
arasmellus, *Zea mays*, Mexico 8794.
yoosphaerella juglandis sp. nov., *Juglans nigra* 7163.
yoosphaerella sentina, disease resistance, *Pyrus amygdaliformis*, *Pyrus communis* 8000.
myrothecium roridum, *Dieffenbachia maculata*, temperature effects on 6255.
Seymouria, *Eucalyptus*, incidence, greenhouses 8942.
holz drummondii, etiology, *Pleospora drummondii* sp. nov., *Stemphylium drummondii* sp. nov. imperfect state 2039.
opus sorghina, incidence, *Grewia asiatica*, India 2034.
phoma, ethylene induction leaves chlorosis 8797.
opulus balsamifera, etiology, *Marssonina balsamiferae* sp. nov., taxonomy, Canada 3913.
pseudomonas, *Sinningia speciosa* 6273.
pseudomonas syringae pv. *berberidis* etiology, *Berberis*, British Isles 8873.
pseudomonas syringae, *Phladiolophus coronarius* 1160.
tridopozzia tritici, *Triticum repens* 8781.
septoria cucurbitacearum, *Cucurbita pepo*, new records, British Isles 5452.
septoria vignicola, pathogenesis, *Vigna sinensis*, role, relative humidity 7779.
temphylium, *Medicago sativa*, Australia 5435.
temphylium vesicarium, pathogenesis, *Asparagus officinalis* 8845.
immarcanoniella trispora, *Mangifera indica* 8808.

ther,

- biodegradation, bacteria, proteolytic enzymes activity 8693.
 fungi, bacteria, biodegradation, museums, Kuwait 1024.
 nning, proteolytic enzymes, bacteria, fungi 48.
 bee alba, biodegradation, microorganisms 181.
 cremonium zonatum penetration, host-pathogen interactions, biological control, *Eichhornia crassipes* 8827.
 ge, effects on, *Oryzomyces phaseoli* infection, appressoria formation, plants 1964.
 filia mosaic virus lesions, *Phaseolus vulgaris*, *Vigna sinensis*, *Nicotiana tabacum* 8857.
 kaloids, antifungal activity, *Solanum aviculare* 8307.
 inus, biodegradation, *Epicoecum nigrum*, *Cladosporium cladosporioides*, aquatic environment 184.
 inus, *Tetrachaelum elegans* biodegradation, pectinolytic enzymes activity, calcium concentration effects on 1002.
 hemaria brassicicola infection, cytokinins secretion, pathogenesis, *Brassica* 8028.
 mopleptis proflera, extracts, antiviral activity, tobacco mosaic virus, cucumber mosaic virus 8333.
 rachis hypogaeae, phenolic acids levels association rust 8771.
 romatic compounds storage cells, antifungal activity, *Cercospora rodmannii*.
 Aromatium zonatum, role disease resistance, *Eichhornia crassipes* 8813.
 adium hortulanum, mycoplasma-like organisms infection, electron microscopy 1163.
 apicum annuum, peroxidase activity, *Phytophthora capsici* disease resistance 2844.
 ell walls, *Nicotiana tabacum*, *Pseudomonas solanacearum* cell adhesion 6282.
 site, ultrastructure, *Glycine max*, plant diseases, cowpea mottle virus 4505.
 morsis, *Poa pratensis*, ethylene induction, leafspot 8797.
 ocos nucifera, detection, cadang-cadang disease viroid 3824.
 ucubita pepo, symptoms, cucumber mosaic virus infection 6259.
 ulture, host plants cultivars, effects on *Puccinia graminis* f. sp. *tritici* infection 1991.
 ulture stramonium, lesions, potato virus X+mixed infection tobacco mosaic virus 288.
 ecomposition, psychrotrophic microorganisms, psychrophilic microorganisms 5306.
 iphysa robinoides, fungi inoculation, phytoalexins production 5519.
 isease resistance, observation methods, *Sorghum* 5426.
 (caulipitus, mycoplasma-like organisms infection 4817.
 racters, digestion (anaerobic) 1070.
 D-fructofuranosidase physicochemical properties, *Puccinia coronata*, crown rust, *Avena sativa* 2109.
 lycine max, *Pseudomonas glycinea* disease resistance, hypersensitive response 319.
 iopathology, disease resistance, *Cladosporium caryigenum*, scab, *Carya illinoensis* 3814.
 iopathology, tomato mosaic virus, *Datura metel*, *Nicotiana tabacum* 7168.
 ioratum vulgare, polyribosomes translation activity, *Erysiphe graminis* f. sp. *hordei* infection 251.
 ypersensitive response proteins, tobacco mosaic virus infection, *Nicotiana tabacum* 7199.
 iection susceptibility, *Phytophthora infestans*, fertilizer applications, *Solanum tuberosum* 2812.
 iection, viruses, cytopathology, *Picea abies*, *Pinus sylvestris* 6325.
 sions, *Phaseolus vulgaris*, hydrogen fluoride effects on *Xanthomonas campestris* pv. *phaseoli* 7133.
 sions, potato virus Y, susceptibility, *Solanum tuberosum* 8836.
 racters, ultrastructure, phyllody, mycoplasma-like organisms, *Leguminosae* 8773.
 rter, biodegradation, *Picea mariana*, *Betula glandulosa*, sub-polar environments 3807.
 ycopersicon esculentum, potato spindle tuber viroid infection, site location, nuclei 3819.
 falus floribunda, *Venturia inaequalis* pathogenicity, growth 7988.

Leaves, (continued)

- Malus pumila*, distribution, tomato ringspot virus 7994.
Meiaelea leucandron, plant extracts, volatiles, antifungal activity.
Rhizoctonia solani 9107.
Nicotiana tabacum, mycoflora, isolation, aflatoxins biosynthesis, Iraq 7089.
Nicotiana tabacum, storage conditions effects on *Aspergillus flavus* aflatoxins biosynthesis 7092.
 nitrogen-15 translocation, seeds, *Bradyrhizobium japonicum* nitrogen fixation, inhibition, *Glycine max* 6370.
Olea europaea, survival, *Pseudomonas syringae* pv. *savastanoi*, pathology 6253.
Oryza sativa, electron microscopy, *Xanthomonas campestris* pv. *oryzae*, growth, penetration 6243.
Oryza sativa, *Rhynchosporium oryzae* infection, histopathology 8793.
Pinus, chemical composition, association, *Fomes annosus* root rot 2116.
Pinus, fungi, decomposition, saprophyte, food preferences, *Porcellio scaber* 2912.
Protomyces macrosporus, galls, biological control, *Torilis japonica* 8029.
Pseudomonas syringae pv. *morumprunorum*, infection, scanning electron microscopy, *Prunus* 2801.
Pseudotsuga menziesii, dehydration, retention, harvesting, *Phaeocryptopus gaeumanni* needlecast effects on 3911.
Psidium, in situ effects on *Azotobacter* 4643.
 resins, *Hymenaea*, *Copaifera*, antifungal activity, *Peestalota subcuticularis* 5506.
 RNA, DNA, levels, *Pyricularia oryzae*, blast, *Oryza sativa* 7978.
 ryegrass mosaic virus infection, inhibitors isolation, *Lolium perenne* 1984.
 soil microorganisms, decomposition, *Euphrasia palustris* 2917.
Sophora japonica, phytoalexins production, *Helminthosporium carbonum* inoculation 1131.
 sucrose content, *Phaseolus vulgaris*, relationship, disease resistance, tobacco mosaic virus infection 8886.
 symbionts, bacteria, actinomycetes, actinomycorrhizas, *Tozzia alpina* 8204.
 tissues, variability, inclusion bodies, *Potyvirus* 8825.
Triticum aestivum seedlings, *Fusarium roseum* inoculation, pathogenicity 7151.
Triticum × *Secale cereale*, stomata size distribution, *Puccinia recondita* rust 6230.
Vigna unguiculata, amino acid composition, *Myrothecium roridum* infection 1977.
Vigna unguiculata, hypersensitive response, *Xanthomonas campestris* pv. *oryzae* 6230.
Vigna unguiculata, plant viruses infection, RNA replication, actinomycin D sensitivity 7931.
Lebanon,
Cucumis sativus, plant diseases, zucchini yellow mosaic virus 4544.
Leccinum,
 spore germination, organic acids production, agar, association, autoclaves, effects on 5934.
Leclaine,
 agglutination, slides, identification *Staphylococcus* 700.
 binding, actinorrhizas, *Frankia*, plants 4602.
 binding, capsules polysaccharides, *Rhizobium leguminosarum* var. *trifolii* 6368.
 germ tubes, *Puccinia graminis* f. sp. *tritici*, races, host-pathogen interactions, rust, *Triticum aestivum* 8092.
Glycine max, agglutination, *Bradyrhizobium japonicum* 3953.
 identification methodology, *Bacillus anthracis* 2491.
 role, *Rhizobium leguminosarum*, *Bradyrhizobium japonicum*, host plants *Lotonosis bainesii*, root hairs symbiosis 6382.
 slides agglutination, *Neisseriaceae* identification methodology 5042.
 spore germination, *Tilletia caries*, *Puccinia graminis*, *Aspergillus flavus*, effects on 3877.
 use, *Neisseria gonorrhoeae* identification methodology 5046.
Leghemoglobin,
 genes, genetic analysis, *Rhizobium*, nitrogen fixation, nodules, *Leguminosae* 2978.
Medicago sativa, nitrogen fixation, nodulation, biomass 2961.
Legionella,
 antibacterial activity, quinolones 5729.
 antibiotic RU 28965, antibacterial activity 4878.
 resistance sensitivity testing, disc-diffusion test, methodology 7418.
 clinical isolates, identification, fluorescent antibody test, comparison, slides agglutination 3301.
 detection, isolation, agar+antiserum methodology 1620.
 epidemiology, water-borne diseases, buildings 4833.
 identification, aniline blue, media (culture) 715.
 infection, immunodiagnosis, immunoassays, man 9291.
 isolation, drinking water, chlorination association 9256.
 membrane proteins, outer membranes, cell walls, purification, characterization unsaturated fatty acids, structure detection, methodology 9308.
 antibacterial activity, ciprofloxacin, norfloxacin 5726.
Legionella bozemanii,
 antigenemia diagnosis, agglutination methodology, Legionnaire's disease, man 1587.
 detection, isolation, agar+antiserum methodology 1620.
Legionella dumoffii,
 antibacterial activity, ciprofloxacin, norfloxacin 5726.
 antigenemia diagnosis, agglutination methodology, Legionnaire's disease, man 1587.
 detection, isolation, agar+antiserum methodology 1620.
Legionella gormanii,
 antibacterial activity, ciprofloxacin, norfloxacin 5726.
 antigenemia diagnosis, agglutination methodology, Legionnaire's disease, man 1587.
 detection, isolation, agar+antiserum methodology 1620.
Legionella longbeachae,
 antibacterial activity, ciprofloxacin, norfloxacin 5726.
Legionella micdadei,
 antigenemia diagnosis, agglutination methodology, Legionnaire's disease, man 1587.
 detection, isolation, agar+antiserum methodology 1620.
 Pittsburgh pneumonia agent, disease transmission, water supplies, hospitals 5854.
Legionella pneumophila,
 antibacterial activity, ciprofloxacin, norfloxacin 5726.
 antibiotic sensitivity testing, intracellular killing, macrophages, guinea-pigs 6506.
 antibodies, counter immunoelectrophoresis, immunodiagnosis, Legionnaire's disease 2478.
 antibodies detection, immunofluorescence, solid phase methods 1656.
 antibodies, kinetics dependent enzyme-linked immunosorbent assay detection 2512.

Legionella pneumophila, (continued)

- antigenemia diagnosis, agglutination methodology, Legionnaire's disease, man 1587
- antigens, use, indirect fluorescent antibody test, heat treatments, comparison, formalin 792
- chlorine susceptibility, drinking water 1327
- contamination, cooling towers, 1-bromo-3-chloro-5,5-dimethylhydantoin chemical control 7531
- contamination, water supply, role, epidemiology, nosocomial infection, Legionnaire's disease, USA, Pennsylvania, man 7528
- cooling towers, ozone bactericidal activity 5851
- culture methodology, drinking water isolates, hospitals 789
- demonstration, waxes, hexamine silver use 3289
- detection, isolation, agar + antiserum methodology 1620
- erythromycin, ampicillin, bactericidal activity, characterization 7451
- geographical distribution, seasonal variations, cooling towers, USA 4130
- identification, peroxidase + catalase test 5039
- immunodiagnosis, use monoclonal antibodies, hydridoma, production 2501
- isolation, media (selective), drinking water 785
- isolation methodology, heat treatments 3333
- isolation methodology, media (culture), guinea-pigs injection, water supplies contamination 4211
- isolation, water supplies, hospitals 1498
- isolation, water supplies, hospitals 4931
- Legionnaire's disease, diagnosis, latex agglutination, man 7622
- Legionnaire's disease diagnosis, media (isolation) methodology, man 4203
- Legionnaire's disease, disease transmission, water supplies, hospitals 5854
- Legionnaire's disease, epidemiology, environmental studies, water supplies, hospitals, man 9251
- Legionnaire's disease, water-borne diseases, water supplies, Italy 4940
- media (enrichment), Acanthamoeba polyphaga, host-pathogen interactions, isolation methodology 2485
- media (selective), sputum, diagnosis, Legionnaire's disease 3336
- membrane proteins, outer membranes, cell walls, purification, characterization 2561
- plasmids, epidemiology, water supplies, Legionnaire's disease, man 4949
- serotyping, use, monoclonal antibodies, hydridoma production 2518
- water supplies, aerosols, disease transmission, epidemiology 3214
- water supplies, legionellosis, epidemiology, Sweden 3216
- Legionellosis,**
- epidemiology, water supplies, hospitals, British Isles, man 3215
- Legionella pneumophila, water supplies, epidemiology, Sweden 3216
- Legionnaire's disease,**
- antigenemia diagnosis, agglutination methodology, man 1587
- diagnosis, latex agglutination, man 7622
- diagnosis, Legionella pneumophila, media (selective), sputum 3336
- diagnosis, media (isolation) methodology, man 4203
- epidemiology, environmental studies, water supplies, hospitals, man 9251
- epidemiology, water supplies, hospitals, British Isles, man 3215
- immunodiagnosis, counter immunoelectrophoresis, Legionella pneumophila antibodies 2478
- Legionella pneumophila plasmids, epidemiology, water supplies, man 4949
- Legionella pneumophila, water supplies, epidemiology, Sweden 3216
- nosocomial infection, epidemiology, role, Legionella pneumophila, contamination, water supply, USA, Pennsylvania, man 7528
- water-borne diseases, water supplies, Italy 4940
- Legislation,**
- disease control, Erwinia amylovora fire blight, Pyrus communis 5463
- occupational exposure, industries, safety regulations, enzymes 45
- Legumes,**
- nodulation, Rhizobium, nitrogen fixation, media (culture), reviews 4657
- Leguminosae,**
- bacteria, nitrogen fixation, interspecific relationships, books 5094
- crops, endomycorrhizas, India 7251
- foliar diseases, phytopathogenic fungi 6237
- host specificity, Rhizobium 9004
- indigenous species, introduced species, nitrogen fixation, rangelands soil 7271
- inoculum production, Rhizobium 6369
- leghemoglobin, nodulin, genes, genetic analysis, nitrogen fixation, Rhizobium 2978
- nitrogen fixation, genetic analysis, symbiosis, Rhizobium 9006
- nitrogen fixation, Rhizobium, genetic resources, gene pools, research programs 2965
- nitrogen fixation, symbiosis, interaction, Rhizobium 9007
- nitrogen fixation, symbiosis, Rhizobium 9005
- nodulation, nitrogen fixation, fast-growing Rhizobium, nif gene, nod gene, gene mapping gene transfer, linkage, reviews 2966
- nodulation, nitrogen yield, Rhizobium inoculation, Colombia soil types 2158
- nodulation, Rhizobium, nitrogen fixation, soil moisture, salinity effects on 2980
- nodulation, Rhizobium, roots infection, vesicular-arbuscular mycorrhizas, Malaysia 8164
- nodulation, roots infection, Rhizobium, genetic analysis, nutrient flow 2974
- nodules, oxygen diffusion, acetylene inhibition, nitrigenase activity, Rhizobium 8252
- nodules, Rhizobium bacteroids, metabolism, carbohydrates, organic acids, reviews 2975
- nodules, Rhizobium bacteroids plasma membranes, role nitrogen fixation 2976
- nodules, Rhizobium, ureides biosynthesis pathways 2971
- nodules, roots, respiration, nitrogen fixation, Rhizobium 2957
- plant viruses, enzyme-linked immunosorbent assay detection 7927
- plant viruses infection 6238
- plant viruses infection, effects on Rhizobium nodulation, nitrogen fixation, reviews 8780
- Rhizobium inoculation, biotechnology 6377
- Rhizobium, nitrogen fixation, nitrogen-15 measurements 7270
- Rhizobium symbiosis, reviews, books 845
- roots infection, Rhizobium, role extracellular polysaccharides, oligosaccharides 2633
- symbiosis, Rhizobium, equipment, association, nodulation, nitrogen fixation 2955

Legume minor, (continued)

structure-activity relationships 1949.

Lemons,

post-harvest decay, Penicillium, disease control 1167.

Lenacil,

herbicides, nitrification, soil 9026.

Lens culture,

agglutination, + agarose immobilization, use, preparation, pseudorabies virus vaccines, pigs 3182

powdery mildew, Erysiphe pisi, pathology, insecticides, acaricides, antifungal activity 8917

Pseudomonas striata seed treatments, phosphate fertilizer applications efficiency 4620

Lens aculeata,

nodulation, soil amendment, calcium oxide, calcium sulfate effects on, Rhizobium 9015

soil pH effects on, Rhizobium leguminosarum, nodulation, nitrogen fixation 407.

Leptinus edodes,

culture, fruit bodies production 8695

fruit bodies production, inoculation, wood 7846

fruit bodies, ribonuclease, purification, characterization 1764

media (culture), nutrient requirements 823

Leptinus lepideus,

biological control, Trichoderma volatiles 7245

Leptidium sativum,

seeds, Pythium ultimum damping-off, biological control, Pythium oligandrum 974

Leprosy,

drug resistance, dapsone, man, reviews 3023

Mycobacterium antibodies, detection, enzyme-linked immunosorbent assay 5057

Mycobacterium antibodies, detection, enzyme-linked immunosorbent assay 5907

Mycobacterium leprae, detection, fluorescent antibody test, microscopy 5904

Mycobacterium leprae viability, ATP bioassays, man 7584

Leptinotarsa decemlineata,

biological control, β -exotoxin, Bacillus thuringiensis 125

biological control, Beauveria bassiana, host plants effects on susceptibility 2651

biological control, pathogens, Beauveria bassiana spores survival, fungicides effects on 2647

pupae, pest control, inoculum survival, soil, Beauveria bassiana 5213

Leptocnops,

biological control, Bacillus thuringiensis 3573

Leptoglossa chapmani,

taxonomy, biological control, larvae, Aedes 8640

Leptosphaeria coniothyrium,

canker, Rubus, USA, Ohio 8846

Leptosphaeria korrae,

Fusarium blight, Poa pratensis, association 5418

Leptosphaeria maculans,

pathogenicity, Brassica 1972

stem canker, post-pathogen interactions, cultivars, Brassica napus 8040

Leptosphaeria briosaiana,

leavespot, Medicago sativa, disease resistance, screening 8087

Leptosphaeria trifolii,

spot, Trifolium repens 8781

Leptosira,

agglutination, diagnosis, leptospirosis 729

antibiotic sensitivity testing 1373

cryopreservation, nitrogen (liquid) 9289

leptospirosis, diagnosis, enzyme immunoassay 8477

media (culture), polysorbate detoxification 9321

microscopy, use, avian biotinylated horseradish peroxidase complex 3283

tissue culture, localization, immunoperoxidase test 4181

vaccines, immunogenicity, pigs 4893

Leptosira interrogans ser. autumnalis,

antibiotic sensitivity testing 1373

Leptosira interrogans ser. canicola,

antibiotic sensitivity testing 1373

Leptosira pomona,

cryopreservation, nitrogen (liquid) 1615

Leptosira pilosella,

copper leaching, industrial wastes 7301

Leptosira pilosella,

diagnosis, agglutination, Leptosira 729

Leptosira pilosella,

diagnosis, enzyme immunoassay 8477

Lesions,

Datura stramonium leaves, potato virus X + mixed infection tobacco mosaic virus 288

leaves, Phaseolus vulgaris, hydrogen fluoride effects on, Xanthomonas campestris phaseoli 7193

Phytophthora cinnamomi stems, development, Phytophthora cinnamomi infection 3842

stems, Pinus elliotii var. elliotii seedlings, fusiform rust, Cronartium quercuum f.sp. fusiforme 7234

Lespedeza striata,

disease reservoirs, host alternation, rust, Phakopsora pachyrhizi 7940

Letture mosaic virus,

monoclonal antibodies production, use radioimmunoassay, diagnosis, plant disease 4998

Letture necrotic yellow virus,

infection, Cicer arietinum, etiology, symptoms, epidemiology 4502

Letture leucocephala,

fermentation, molasses, effects on 3724

nodulation, Rhizobium strains competition, tropical environment soil 7267

Rhizobium inoculation, nodulation 6373

yield, inoculation, vesicular-arbuscular mycorrhizas, Glomus fasciculatus, \pm Rhizobium 7276

Letture separata,

larvae molting, inhibition, L-alanine, growth regulators, Streptomyces 7774

Leucanidin,

Streptomyces halstedii, structure 9217

L-Leucine,

overproduction, mutants, transformation, Brevibacterium lactofermentum 5116

production, Bacillus sphaericus leucine dehydrogenase + Candida boidinii formaldehyde dehydrogenase, membranes reactor 3

- aldehyde dehydrogenase**,
Bacillus sphaericus, + *Candida boidinii* formate dehydrogenase, L-leucine production, membranes reactors 3.
 substrate specificity, kinetics, pyridoxal 5'-phosphate inactivation, *Bacillus sphaericus* 5149.
- autoantigen**,
 separation, characterization, *Paecilomyces lilacinus* 3144.
 structure, *Paecilomyces lilacinus* 3145.
- autoantigen**,
 antimicrobial activity, *Streptococcus cremoris* bacteriocins, role dairy starters 2311.
 dairy starters, phages contamination, reviews 210.
 dextran, biosynthesis, industrial applications, reviews 8617.
 malic acid metabolism, silage 6200.
 proteolytic enzymes characterization, role, milk products production, reviews 96.
autoantigen,
 daily starters, ermo compounds production, mutagenesis, U.V. radiation, N-nitroso-N-methyl-N-nitroguanidine 1906.
- autoantigen lactia**,
 fermentation, cheese 3693.
- autoantigen mesenteroides**,
 anaerobic conditions, glycolysis, aeration effects on 854.
 dextran biodegradation, enzymatic activity 7818.
 dextranucrase, activation, association, dextran 5993.
 dextranucrase biosynthesis 924.
 dextranucrase biosynthesis 1744.
 dextranucrase biosynthesis 5975.
 enumeration, oranges juices frozen products 7850.
 mutants, dextranucrase purification, use dextranase, immobilized enzymes 5147.
 use, production, whey+sucrose liquid culture 8474.
- autoantigen oenos**,
 cattle bile resistance, effects on viability, freeze-drying, malolactic fermentation, wine 6125.
 immobilized cells, malolactic fermentation 6931.
 immobilized cells, malolactic fermentation, wine 165.
 malic acid assimilation, malolactic fermentation, transformation, *Escherichia coli* 3627.
 malolactic fermentation activity purification, affinity chromatography 8600.
 malolactic fermentation, musts, organoleptic evaluation, wine 2692.
 malolactic fermentation, 2,3-butanediol levels, wine 2693.
 starter cultures, drying, storage, viability, malolactic fermentation, wine 7816.
 starter cultures, vitamins effects on growth 5269.
- autoantigen**,
 amylolytic enzymes production 8546.
- autoantigen**,
 cells, T cell leukemia virus proviruses, DNA hybridization analysis 5884.
 man, aseptic, laminar air flow, nosocomial environments 572.
 man, laminar air flow, nosocomial environments 575.
 man, laminar air flow, nosocomial environments, infection prophylaxis 577.
- autoantigen**,
 esterase activity, detection, bacteriuria 731.
 phagocytosis, *Staphylococcus aureus* killing, ansamycin antibacterial activity relationship 2298.
 phagocytosis, *Staphylococcus aureus*, rifamycin interaction 7450.
- autoantigen (neutrophilic)**,
 chemotactic factors, purification, characterization, *Streptococcus sanguis* 2556.
- autoantigen (polymorphonuclear)**,
 antibiotics penetration, antibacterial activity, man 492.
 phagocytosis, *Staphylococcus*, fibronectin interactions, clindamycin effects on 514.
- autoantigen**,
 inhibition, retrovirus infection, fibroblasts 469.
- autoantigen**,
 production, *Bacillus* 4365.
- autoantigen**,
 biosynthesis, nitrogen sources, *Bacillus* 7764.
- autoantigen taurica**,
 powdery mildew, incidence, *Lycopersicon esculentum*, *Cytophaga tetragonoloba*, *Nicotiana glauca*, *Caesalpinia gilliesii*, USA, Arizona 8035.
- autoantigen**,
 biosynthesis, *Streptomyces levis*, association, *Candida tropicalis* stimulants activity 2318.
- autoantigen**,
 purification, characterization, *Bacillus subtilis* 6855.
- autoantigen**,
 polysaccharides, books 3383.
- autoantigen**,
 antibacterial activity comparison, cotrimoxazole 8299.
- autoantigen**,
 Agaricus bisporus, lignocelluloses biodegradation 1879.
 Cryptosporidia corticale, strains compatibility, sooty bark, *Acer pseudoplatanus* 8190.
 Puccinia chondrillina, biological control, *Chondrilla juncea* weed control, USA, Washington 6074.
 Puccinia japonica, rust, *Anemone flaccida* 8011.
 spore germination, conidia, *Penicillium daleae*, *Penicillium bilaii*, soil 8959.
- autoantigen**,
 direct, *Erysiphe pisi* conidia spore germination, germ tubes formation relationship 2774.
 effects on *Aspergillus aflatoxigen* biosynthesis, in vitro 7071.
 effects on ethylene biosynthesis, hypersensitive response, tobacco mosaic virus, *Nicotiana tabacum* 2061.
 effects on nutrient uptake, vesicular-arbuscular mycorrhizas, inoculum density, *Trifolium repens* 5214.
 effects on Populus disease resistance, *Melampsora medusae* infection 360.
 inhibition *Bradyrhizobium japonicum* nodulation, cotyledons, Glycine max 8248.
 packaging, effects on bacteria growth, spoilage 4465.
 pseudorabies virus photoinactivation 468.
 relationship, *Phaseolus vulgaris* disease resistance, tobacco mosaic virus infection 8886.
 sensitization, tryptin like enzymes, streptomycetes giseus, use electronic equipment 66.
- autoantigen**,
 arabis mosaic virus, pathogenesis, *Cucumis sativa* 2009.
 effects on *Corynebacterium sepeoduncum*, ring rot, *Solanum tuberosum* 7998.
 effects on *Glomus macrocarpus* infection, *Eupatorium odoratum*, *Capsicum annuum* 3652.
- autoantigen**,
 Light intensity, (continued) 8975.
 effects on hydrogen gas production, *Rhodospseudomonas capsulata* 5219.
 effects on sporulation, teliospores, urediniospores, infection, *Cornarium lacodum*, *Vincetoxicum officinale* 3927.
- autoantigen**,
 Pisum sativum leaves, comparison, direct light, relationship, *Erysiphe pisi* conidia spore germination, germ tubes formation 2774.
- autoantigen**,
 enzymes, *Nicotiana tabacum*, tobacco mosaic virus infection, hypersensitive response 7193.
- autoantigen**,
 arylglycerol- β -aryl ethers, biodegradation pathway, *Phanerochaete chrysosporium* 2712.
 biodegradation, *Aspergillus* 7819.
 biodegradation, association, decay fungi, white rot, brown rot, soft rot, lignocellulose, syringic acid, metabolism 2705.
 biodegradation, *Basidiomycetes* pretreatment, *Triticum aestivum* straw 1009.
 biodegradation, depolymerization, respiration, *Phanerochaete chrysosporium* 7817.
 biodegradation, enzymes, protoplasts, *Fomes annosus* 8673.
 biodegradation, fungi, bacteria 6152.
 biodegradation, humus formation, microorganisms, pathway 8965.
 biodegradation, lignocelluloses, cellulase deficient mutant, *Sporichium pulverulentum* 1886.
 biodegradation, lignocelluloses fermentation, white rot, optimization, straw, *Triticum aestivum* 1887.
 biodegradation, mechanisms, *Phanerochaete chrysosporium* 4442.
 biodegradation, metabolism, *Corticium versicolor* 5308.
 biodegradation, microorganisms, microorganisms 2725.
 biodegradation, microorganisms 7820.
 biodegradation, microorganisms, reviews 4436.
 biodegradation, oxygenase, purification, characterization, *Phanerochaete chrysosporium* 6011.
 biodegradation, *Phanerochaete chrysosporium* 1984.
 biodegradation, *Phanerochaete chrysosporium*, growth patterns 179.
 biodegradation, *Phanerochaete chrysosporium* mycelia, hydrogen peroxide production, fatty acyl-CoA oxidase activity 3476.
 biodegradation, *Phanerochaete chrysosporium*, oxygen incorporation 4431.
 biodegradation, protocatechuate 3,4-dioxygenase, catechol 1,2-dioxygenase, fungi, bacteria 4440.
 biodegradation, reviews 7829.
 biodegradation, *Sporichium pulverulentum* 1010.
 biodegradation, straw, *Cyanthus* 3653.
 biodegradation, *Streptomyces vinosporus*, *Streptomyces setonii*, protoplast fusion, enhancement 2702.
 biosynthesis, biodegradation, biotechnology, reviews 3599.
 biosynthesis, hypersensitive response, *Puccinia graminis* f.sp.tritici, stem rust 2059.
 biosynthesis, incompatibility, *Melampsora lini*, rust, host-pathogen interactions, *Linum usitatissimum* 8046.
 decomposition, soil microorganisms, urea fertilization effects on, forests 5578.
 degradation enzymes, purification, characterization, *Phanerochaete chrysosporium* 3452.
 degradation, *Ganoderma tsugae*, soft rot, *Tsuga canadensis* 3917.
 degradation, models, role oxygen free radicals, photochemistry, fungi 3663.
 deposition, *Cucumis sativus*, disease resistance, *Cladosporium cucumerinum* 7205.
 deposition, disease resistance, *Solanum tuberosum*, pathogenicity, *Fusarium roseum*, *Cladosporium cucumerinum* 7206.
 hydrolysis, pulp mills, enzymes, fungi, paper mills 49.
 industrial effluents, pulp mills, waste water, fungi, coastal waters 1455.
 lignocelluloses, *Spartina alterniflora*, *Rhizophora mangle*, biodegradation 5305.
 metabolism, association, biodegradation 3-4'-ethoxy-3'-methoxyphenyl)-2-(4'-methoxyphenyl)propionic acid, *Phanerochaete chrysosporium* 3662.
 peanuts, bacteria biodegradation 177.
 Quercus rubra, Quercus alba, Xyllobius frustulatus, biodegradation 3674.
Spartina alterniflora, *Juncus roemerianus*, *Pinus elliotii*, fungi, role, mineralization, marine environment 1026.
 Trichosporon penicillium biodegradation, crop residues, Zea mays 6950.
 wood, *Stereum frustulatum*, enzymes, biodegradation 1022.
- autoantigen**,
 Agaricus bisporus biodegradation, life cycle 1879.
 agricultural wastes, carbon sources, endo-1,3- β -D-glucanase production, *Streptomyces* 3470.
 Arthrobaacter, biodegradation, effects on, digestibility, *Ruminantia* 7882.
 biodegradation, Chaetomium cellulosum, *Sporichium pulverulentum*, single-cell protein production, pretreatment, sodium hydroxide, hydrogen fluoride, steam 1712.
 biodegradation, cotton, ginning, industrial wastes, textile industry, *Pycnoporus cinnabarinus* 6164.
 biodegradation, *Fomes annosus*, white rot 5309.
 biodegradation, microorganisms, enzymatic activity 3688.
 biodegradation, *Oryza sativa* residues, use methanogenesis, culture, *Pleurotus sajor-caju* 2697.
 biodegradation, sugars production, *Termitomyces clypeatus* 3527.
 cell walls, steam disruption, cellulase hydrolysis 5278.
 cellulase hydrolysis, high pressure carbon dioxide-steam pretreatment, crop residues 1748.
 cellulase hydrolysis, solvents pretreatment 8683.
 cellulase hydrolysis, use production, single-cell protein 1885.
 conversion, xyllose metabolism, *Candida* 3651.
 crop residues, digestion (anaerobic), methanogenesis 5696.
 detritus, biodegradation, bacteria, fungi, salt marshes sediments 6171.
 ethanol production 3600.
 fermentation, biomass measuring techniques, nitrogen-15, mass spectroscopy, *Chaetomium cellulosum* 5310.
 fermentation, crop residues, ethanol production, *Saccharomyces cerevisiae* 5292.
 fermentation, ethanol production, cellulase + hydrogen peroxide 5303.
 fermentation, ethanol, production, *Clostridium thermocellum*, *Clostridium thermosaccharolyticum*, *Clostridium thermohydrosulphuricum* 4418.
 fermentation, production, ethanol, *Candida orthodromiformis* 3617.
 fermentation, silage, feeds production, tropical environment, *Gramineae* 5358.
 fermentation, single-cell protein production, nutritive value, conferences 2544.
 fermentation, white rot, optimization, straw, *Triticum aestivum* 1887.
 hydrogen peroxide pretreatment, cellulolytic enzymes activity, *Trichoderma reesei* 3652.

Lignocelluloses, (continued)

- hydrolysis, cellulase activity, ethanol production, 2,3-butanediol production, Trichoderma reesei, Trichoderma harzianum, Klebsiella pneumoniae, Saccharomyces cerevisiae, Zygomonas mobilis 5274.
- hydrolysis, cellulase, use sugar fermentation, reviews, microorganisms 2599.
- hydrolysis, industrial wastes, fuels production, industrial wastes, paper mills, cellulolytic microorganisms 7781.
- hydrolysis, solvents pretreatment, cellulase, Trichoderma reesei 8536.
- hydrolysis, sugars, assays, 2,4-dinitrosalicylic acid 8680.
- hydrolysis, sugars production, kinetics, models, cellulase 3474.
- hydrolysis susceptibility, γ radiation effects on 3654.
- lignin biodegradation, cellulase deficient mutant, Sporotrichum pulverulentum 1986.
- lignin, polysaccharides, Spartina alterniflora, Rhizophora mangle, biodegradation, microorganisms 5305.
- macrophytes, biodegradation, microorganisms 2704.
- man-made, biodegradation, cellulase, Trichoderma 2711.
- ozone pretreatment, cellulolytic enzymes activity, rumen microorganisms 3459.
- ozone pretreatment effects on biodegradation 1880.
- Penicillium funiculosum, cellulase, hydrolysis 3484.
- proteins levels, Lowry assay, Clostridium thermocellum 4424.
- Pseudotsuga menziesii, streams, factors affecting, microorganisms, biodegradation 999.
- straw, sodium hydroxide hydrolysis, acid production, methanogenesis, methanogenic bacteria 9032.
- Trichoderma harzianum cellulase hydrolysis, factors affecting 1892.
- Trichoderma reesei, cellulase, hemocellulase, hydrolysis 7833.
- Trichoderma aestivum, Acanthaceae, biodegradation, Cyathus, Crucibulum laeve, Nidula niveo-tomentosa 5948.
- Trichoderma aestivum, biodegradation, white rot fungi 6943.
- Lilaceae**, host range, infection, Sclerotium cepivorum, disease resistance 8043.
- Lilium**, leafy gall, etiology, Corynebacterium fascians, Belgium 4531.
- Limonin**, levels, fruit juices, bitterness reduction, immobilized cells, Arthro bacter globiformis 5338.
- Limonium sinuatum**, Pseudomonas caryophylli, crown rot, leaf rot, etiology 4560.
- Limulus lysate test**, bacteria endotoxins 1958.
- bacteria endotoxins, Trichoderma 4490.
- detection spoilage, Enterobacteriaceae, luncheon meat 6967.
- diagnosis, gonorrhea, Neisseria gonorrhoeae, females, man 3276.
- diagnosis, urethritis, Neisseria gonorrhoeae, methodology, man 671.
- Escherichia coli lipopolysaccharides, association heat treatments 227.
- methodology, endotoxins plasma levels 1941.
- spirochaetes endotoxins, Lyme disease 5385.
- Lincolol**, volatiles biosynthesis, association odors, Pleurotus euosmus 133.
- Lincomycin**, antibacterial activity, in vitro, pediatrics, reviews 5783.
- antibacterial activity, Staphylococcus aureus, enzymes biosynthesis inhibition 9137.
- antibiotic resistance, antibiotic sensitivity testing, Mycoplasma, animal isolates, chickens 3087.
- effects on Bacillus subtilis, sporulation, stringent response 2242.
- effects on Escherichia coli enterotoxins, biosynthesis, properties 228.
- protein synthesis 2254.
- production, disc-diffusion test, Streptomyces lincolnensis 7445.
- γ -pyrantel tartrate, feeds, prophylaxis, treatment, Trigonema hyodysenteriae, dysentery, pigs 1918.
- Lindane**, isomers, biodegradation, soil microorganisms 3023.
- Linkage analysis**, disease resistance, genes, Lactuca sativa 5474.
- genes, penicillin biosynthesis, protoplast fusion, Aspergillus nidulans, Aspergillus rugulosus 4047.
- Triticum aestivum seedlings, Puccinia rust 258.
- zmm gene, inheritance, zucchini yellow mosaic virus disease resistance, Cucumis melo 5478.
- Linoleic acid**, antagonism, gentamicin bacteriostasis 4052.
- biosynthesis, growth rate, continuous culture, cryptococcus albidus, Trichosporon pullulans 6925.
- metabolism, Eubacterium lentum 1888.
- Linum usitatissimum**, disease resistance, Melampsora lini rust, India 3875.
- peroxidase activity, lignin biosynthesis, incompatibility, host-pathogen interactions, rust, Melampsora lini 8046.
- wilt, Fusarium oxysporum, biological control, suppression, Pseudomonas putida, survival, soil moisture 2897.
- Lipase**, stimulation, alginate acid role, Pseudomonas aeruginosa M form defective mutant 2570.
- Liparmycin**, effects on Bacillus subtilis, sporulation, stringent response 2242.
- N.M.R., structure 2284.
- Lipid A**, fractions, enzyme-linked immunosorbent assay, thin-layer chromatography 5064.
- proteins complex, endotoxins, characterization, purification, Yersinia pseudotuberculosis subsp. pseudotuberculosis 3763.
- Lipid composition**, Pleurotus ostreatus 5336.
- Schizosaccharomyces pombe membranes, drug resistance relationship 3990.
- single-cell protein, thermophilic fungi 860.
- Taphrina deformans, CGA 64250, effects on 2084.
- Lipid peroxidation**, Aspergillus parasiticus, Aspergillus flavus, aflatoxins biosynthesis 1077.
- Lipids**, Acheleplasma laidlawii, methanol, acetone, use, extraction, association, freezing 3314.
- Agrobacterium tumefaciens, role polysaccharides biosynthesis, glucose, galactose 6886.
- biosynthesis, fermentation, milk, dairy starters 7865.
- biosynthesis, fluorescence, fungi 1678.

Lipids, (continued)

- biosynthesis, growth rate, continuous culture, cryptococcus albidus, Trichosporon pullulans 6925.
- carbon sources, fermentation, aeration, salinomycin production, Streptomyces albus 4874.
- emulsions, Klebsiella pneumoniae, Enterobacter cloacae, growth, endotoxins production 1946.
- emulsions, waste treatment, activated sludge 3195.
- extraction methodology, lysochastin use, Staphylococcus aureus 7578.
- levels, chickens liver, Fusarium vomitoxins contamination 2748.
- metabolism, Staphylococcus aureus membranes, lipotechoic acid biosynthesis 4266.
- monitoring, optimization, erythromycin production, fermentation, Streptomyces erythraeus 6546.
- ornithine containing, mass spectroscopy, Thiobacillus thiooxidans 5024.
- potentiation, aminoglycoside antibiotics, antibacterial activity, Streptococcus mutans 9181.
- production, Candida tropicalis 5239.
- production, carbon sources, nitrogen sources, Spacelotheca reiliana, Tolyposporium ehrenbergii 1850.
- production, factors affecting, Tolyposporium ehrenbergii, Spacelotheca reiliana 5250.
- production, fatty acid composition, sterol composition, Rhodotulula glutinis 5219.
- production, fatty acid composition, yeasts 3583.
- production, Rhodotulula glutinis, association, nutrient utilization, growth rate 970.
- production, Rhodotulula glutinis, nutrient requirements, nitrogen sources, carbon sources 1868.
- production, why, nutrient sources, Aspergillus nidulans, Penicillium frequentans, Fusarium lycopersicum 7788.
- surfactants, production, continuous culture, Pseudomonas aeruginosa 6922.
- Lipoic acid**, reduction, fecal coliforms, indicator species, potentiometry, water analysis, microbial pollution 2392.
- Lipoylase**, bacteria growth, meat isolates 1059.
- yeasts, food contamination, seafood 5340.
- Lipomyces**, amylolytic enzymes production 8546.
- Lipomyces starkeyi**, dextranase biosynthesis, feedback inhibition, prevention, 2-deoxy-D-glucose, D-glucosamine 4331.
- endodextranase, purification, characterization 2586.
- Lipopolysaccharides**, bacteria, purification 3537.
- Campylobacter fetus subsp. jejuni, carbohydrate composition, endotoxins, toxicity testing, mice 1945.
- 3-deoxy-D-manno-2-octulosonic acid derivatives, Vibrionaceae 5200.
- Escherichia coli, characterization, electrophoresis, immunoassays 6058.
- Escherichia coli, Limulus lysate test, pyrogens tests, association heat treatments 227.
- fat acid composition, capsules, Bacteroides fragilis 6867.
- Neisseria meningitidis, conjugation, Clostridium tetani toxoids, antibody response, vaccines, rabbits 1453.
- oligosaccharides structure, Neisseria meningitidis 1832.
- Pseudomonas solanacearum, interaction, Solanum tuberosum agglutinins 6285.
- Pseudomonas solanacearum, structure, role, hypersensitive response, Nicotiana tabacum 7169.
- Shigella flexneri, oligosaccharides biosynthesis 1834.
- structure, antibiotic resistance, β -lactam antibiotics, Pseudomonas aeruginosa 7349.
- structure, antigen O, Vibrio cholerae 3529.
- structure, Campylobacter jejuni, Campylobacter coli 6053.
- structure, gentamicin, antibiotic resistance, Pseudomonas aeruginosa 7350.
- Liposomes**, Bacillus colistinus, plasma membranes, role antibiotic resistance, colistin 9074.
- containing streptomycin, chloramphenicol, phagocytosis, antibacterial activity, Escherichia coli infected macrophages 513.
- incorporation, influenza virus, rubella virus, membrane proteins, immunogenicity, vaccines, rabbits 6850.
- morphogenesis, fusidic acid biosynthesis, metabolism, fusidium coccineum 7469.
- Lipotechoic acid**, biosynthesis role, lipids metabolism, Staphylococcus aureus membranes 4266.
- release, Staphylococcus aureus, cefmetazole, comparison, β -lactam antibiotics, antibacterial activity 1393.
- Lipoxygenase**, activity, Saccharomyces vini 5171.
- purification, characterization, mitochondria, Saccharomyces cerevisiae 913.
- Liquid chromatography**, comparison, thin-layer chromatography, analysis, aflatoxins, food contamination, peanuts 8731.
- determination, aflatoxicol, aflatoxin M1, aflatoxin B1, eggs, food contamination 8732.
- determination, aflatoxins, aflatoxin, peanuts 8729.
- fungi T-2 toxin, HT-2 toxin assays, Triticum aestivum, Secale cereale 3739.
- use, detection, ergot alkaloids, grain, flour 7050.
- Liquid culture**, bacteria counting techniques 2450.
- citric acid production, Aspergillus niger 6814.
- citric acid production, mutants, Aspergillus niger 1708.
- comparison, blood culture, isolation, methodology, bacteria, fungi 3260.
- detection, bacteremia, fungemia, aerobic conditions, anaerobic conditions, effects on 2514.
- extracellular β -D-glucosidase production, Penicillium funiculosum 919.
- Fusarium graminearum, production, vomitoxin 2575.
- Hirsutella thompsonii var. synnematales, conidia production, inoculum, biological control, Phyllosticta oleivora 3363.
- inoculum levels effects on pectinolytic enzymes production, Aspergillus alliaceus 4352.
- inoculum production, ectomycorrhizas 5937.
- media, Candida comparison Trichomonas vaginalis, isolation 8482.
- media (culture), agitation equipment, fermenters 5874.
- media (culture), glucose ammonium tartrate, degradation, sterilization, autoclaves 8490.
- methodology, septemia detection, man 2466.

quid culture, (continued)

methodology, Streptomyces air spora preservation 3292.
Morchella esculenta mycelia 7633.
 phytoxin production, *Cochliobolus victoriae* 8743.
 Polyporus squamosus mycelium, growth rate 822.
 sucrose, detection, bacteremia, fungemia, man 2522.
 Viticidalia, biosynthesis, antibiotics, phytochemicals 972.
 whey+sucrose, production, use, *Leuconostoc mesenteroides* 8474.

quid
 aluminum reactors, *Pseudomonas fluorescens* fouling organisms, films formation 2382.
 dilution rates, rumen microorganisms continuous culture, fermentation 5295.
 media (enrichment), *Campylobacter jejuni* isolation 5049.
 phase transition, gases, *Saccharomyces italicus* fermentation, spectrometry fermenters 154.
 preservatives, effects on microorganisms growth, urine culture 3268.

sterile
 bioassays, identification, clinical aspects, methodology 5075.
 clinical isolates, moxalactam, antibacterial activity 5768.
 isolation, polluted environments, methodology 4951.
 media (selective) 3314.
 reactors, cutting fluids biodegradation, bacteria identification 178.

sterile monocytogenes
 antibacterial activity, mezlocillin 4884.
 EDTA-tromethamine + antimicrobial agents antibacterial activity 4816.
 pathogenicity assays, hemolysis 695.
 rifamycin, antibacterial activity 8362.

toxicologic acid
 derivatives, antifungal activity, antibacterial activity, gram-positive bacteria, gram-negative bacteria 8337.

tree
 acetylene reduction, nitrogen-fixing bacteria, forests, *Eucalyptus obliqua*, Pinus radiata 8937.
 biodegradation, winter, sub-polar environments 3907.
 decomposition, soil microorganisms, rain forests, tropical environment 7224.
 decomposition, soil microorganisms, rain forests, tropical environment 7226.
 forests, effects on mycorrhizas growth, seedlings, *Pseudotsuga menziesii*, Thuja plicata 5546.
 forests, wood, biodegradation, microorganisms 5537.
 growth cycle, *Picea sitchensis* plantations 8167.
 plant debris decomposition, humus production, Pinus pumila, microorganisms 3952.

tree fall
 wood, decomposition, forests, Fagus sylvatica, Quercus petraea, British Isles 352.

tree leaf
 mycoplasma-like organisms, Ipomoea batatas 6286.
 mycoplasma-like organisms, phloem, *Vaccinium vitis-idaea*, *Vaccinium myrtillus* 6275.
 rickettsia-like organisms, mycoplasma-like organisms, disease transmission, treatment, *Wissadula perniciosa*, Jamaica 2047.
Wissadula perniciosa, etiology, rickettsia-like organisms, mycoplasma-like organisms, Jamaica, new records 2046.

tree
 Aspergillus aflatoxin Q1 metabolism, tree 223.
 catalase, + Aspergillus niger glucose oxidase, immobilized enzymes, glucose oxidation, cattle 2578.
 chickens, lipids levels, Fusarium vomitoxins contamination 2748.
 Desoxydase, *Mycobacterium leprae* infection, isolation methodology 5903.

vestock
 feeds additives, antibiotics, antibiotic resistance, bacteria, reviews 9062.

obelia erinus
 seed treatments, steam, disease control, *Alternaria tenuis* 2082.

acel
 pc loss inheritance, association white rust, *Albugo candida* disease resistance, Brassica napus 2854.
 pc loss, gene expression, Periconia circinata, phytochemicals effects on, host-pathogen interactions, Sorghum 4519.
 thymidine kinase, DNA polymerase, relationship, 9-(2-hydroxy ethoxymethyl)guanine, resistance, herpes simplex virus 1 5723.
 turmeric, tur locus, production, role plasmids, streptomycetes hygroscopicus 3147.

cuta migratoria
 entomopoxvirus infection, use biological control 6905.

odderomycetes
 n-alkanes metabolism, induction, respiratory enzymes, mitochondria 7307.

odderomycetes elongisporus
 antifungal activity, essential oils, spices 8318.

oilum
 hemichelluloses, sodium hydroxide hydrolysis, production, xylene isomerase, endo-1,3- β -D-xylanase, *Streptomyces flavogriseus* 5186.
 Puccinia coronata leaf rust, disease resistance, cultivars 3874.

oilum perenne
 Fusarium culmorum infection, disease control, use, calcium peroxide, comparison, carbendazim, dazoxolonol 1203.
 growth, endomycorrhizas, interaction, nitrogen, phosphorus 8971.
 leaves, inhibitors isolation, ryegrass mosaic virus infection 1984.
 pasture, cancer infection, toxins production, *Corynebacterium rathayi* 6215.
 rhizoplane microorganisms, bacteria, association, phosphorus, nitrogen, effects on 6334.
 rhizosphere microorganisms, community composition, mixed culture, Plantago lanceolata, Trifolium repens 372.
 rhizosphere microorganisms, phosphate-dissolving bacteria, phosphate dissolution 7255.
 roots, fungi incidence, nitrogen, phosphorus effects on 6340.
 seedling, via, fungicides applications, disease control 8108.
 silage fermentation, phytochemicals biosynthesis, growth, *Fusarium roseum*, *Fusarium tricinum*, *Lolium perenne* 5369.
 yield, inoculation, *Azospirillum brasilense* + vesicular-arbuscular mycorrhizas, nitrogen fixation, nutrient uptake 1257.

ong-term effects
 plant viruses infection, Malus 6250.

Loose smut, (continued)

Ustilago nuda var. tritici, disease resistance, plant breeding, disease resistance, Triticale 1183.

Lophodermium sulcigena
 needlecast, Pinus sylvestris, association nutrient dynamics 5601.

Lotononella balsae
 host plants, root hairs symbiosis, Rhizobium leguminosarum, Bradyrhizobium japonicum, role lectins 6382.

Lotus corniculatus
 silage, proteolysis 1068.

Lotus pedunculatus
 nitrogen fixation, fertilizers, nitrogen sources, nodulation 2160.

Lowry assay
 proteins levels, lignocelluloses, Clostridium thermocellum 4424.

Lubricants
 medical instruments, effects on isolation, Chlamydia trachomatis, Neisseria gonorrhoeae, genital tract 697.

Lucanthone
 analogs, bactericidal activity 4742.

Lumbricidae
 activity, microorganisms acid phosphatase stimulation, activated sludge 7265.

Luminous bacteria
 bioassays, toxicity testing, aquatic environment pollutants 1601.

Luncheon meat
 contamination, bacteria growth, nitrite association 2728.
 isolation, Bacillus licheniformis, Streptococcus faecium, biodegradation 2727.
 packaging, films, oxygen permeability, Clostridium botulinum growth inhibition, sodium nitrite, potassium sorbate, lactic acid bacteria, starter cultures 7023.
 spoilage, Enterobacteriaceae, detection, Lysate lysate test, catalase production 8967.
 vacuum packaging, *Pseudomonas*, packaging, spoilage 8715.

Lung
 Haemophilus influenzae antigens detection, agglutination, pigs 2520.
 pigs, slaughter, Haemophilus influenzae, dilution methodology 2463.

Lupine dehydrogenase
 isolation, characterization, *Pseudomonas fluorescens* 6009.

Lupinus
 nodules, Rhizobium lupini isolation, carbon dioxide utilization association nitrogen fixation 3022.
 Phomopsis leptostromiformis infection, epidemiology, Australia 7926.

Lupinus angustifolius
 anthracnose, susceptibility, Colletotrichum trifolii, Colletotrichum fragariae 2784.
 patch, Rhizoctonia solani, surveys, soils (calcareous) 255.

Lupinus luteus
 disease reservoirs, host alternation, rust, Phakospora pachyrhizi 7940.

Lupinus termis
 plant extracts, antifungal activity, aflatoxins biosynthesis, Aspergillus flavus 7897.

Luteovirus
 antigenic characteristics, identification, Gramineae, China, People's Rep. 8796.

Lycium barbarum
 plant extracts, antimicrobial activity 8339.

Lycopersicon
 Fusarium, biosynthesis, role, plant diseases, reviews 7100.

Lycopersicon
 cultivars, plant breeding, disease resistance, speck, Xanthomonas campestris pv. vesicatoria 2829.
 disease resistance inheritance, Phytophthora nicotianae f.sp. nicotianae, foot rot, root rot 296.

Lycopersicon esculentum
 alfalfa mosaic virus infection, disease resistance 309.
 Alternaria solani biological control, antagonism, Aureobasidium pullulans 2080.
 bacteria speck, disease control, mancozeb + cupric hydroxide 6310.
 buckeye rot, soil moisture effects on pathogenesis, Phytophthora parasitica 5458.
 canker, *Corynebacterium michiganense* subsp. michiganense, disease reservoirs, soil-borne diseases, crop residues 8872.
 Cladosporium fulvum infection, chlorosis, necrosis 5465.
 cotyledons, lesions, *Corynebacterium michiganense* subsp. michiganense, identification, plant diseases 1158.
 cultivars, disease resistance, Verticillium wilt 1178.
 cytokinins content, tomato spotted wilt virus infection 4567.
 fruits, ethylene production, Rhizopus stolonifer infection effects on 2011.
 fruits, yield, spot, Xanthomonas campestris pv. vesicatoria effects on 277.
 genetic analysis, disease resistance screening projects, speck, *Pseudomonas syringae* pv. tomato 5482.
 Glomus, mixed infection, tobacco mosaic virus, electron microscopy 4535.
 growth stimulation, soils (saline), inoculation, vesicular-arbuscular mycorrhizas 5616.
 infection, tomato yellow top virus, antigenic relationship, potato leaf roll virus, beet western yellows virus 8847.
 inheritance, disease resistance, anthracnose, Colletotrichum dematium 2851.
 inheritance, disease resistance genes, *Pseudomonas syringae* pv. tomato, speck 2828.
 late blight, Phytophthora infestans, disease control, fungicides 1206.
 leaf blight, *Pseudomonas viridiflava*, etiology 4561.
 leaves, potato spindle tuber viroid infection, site location, nuclei 3819.
 necrosis, *Pseudomonas corrugata*, immunodiagnosis, enzyme-linked immunosorbent assay 8835.
 pathogenesis, mixed infection, *Fusarium oxysporum* f.sp. lycopersici + *Melioidogyne incognita* 8831.
 pathogenicity, races, Verticillium dahliae, Morocco 8038.
 phenomenon detection, high-performance liquid chromatography, infection, Phoma destructiva 8824.
 phenomenon formation, infection, Phoma destructiva 8848.
 phytochemicals characterization, Verticillium albo-atrum infection 7200.
 phytotoxicity, alternariol A, Alternaria solani 2813.
 plant breeding, cultivars, disease resistance, speck *Pseudomonas syringae* pv. tomato 1179.
 plant breeding, disease resistance, *Fusarium wilt*, *Melioidogyne* infection 2864.
 plant breeding, disease resistance, plant viruses 3856.
 plant diseases, tomato yellow leaf curl virus, cytology 4542.
 plant diseases, tombusvirus 4540.
 pollen, formation, ultrastructure, tobacco rattle virus infection 8005.
 potato spindle tuber viroid infected, purification, pathogenesis relationship proteins 8853.

Loose smut, (continued)

Ustilago nuda, Hodeum vulgare disease resistance, Ethiopia 5503.
 Ustilago nuda var. tritici, association, burn, Neovossia indica, pathology, Triticum aestivum 8799.

Lycopercospora esculentum, (continued)

- powdery mildew, *Leveillula taurica*, incidence, USA, Arizona 8035.
Pythium aphanidermatum damping-off, disease control, benomyl, demosan, captan 1228.
Rhizoctonia solani sclerotia biological control, *Verticillium biguttatum* treatment 325.
 rhizosphere microorganisms, soil microorganisms, population levels 8990.
 rhizosphere, Saprolegniaceae, *Fyhiaceae* 8220.
 ring spot, etiology, tomato mosaic virus strains, USA, California 8842.
 root rot, *Phytophthora parasitica*, disease control, metalaxyl, sulfadocine 5532.
 roots, brown rot, *Pyrenochaeta lycopersici* isolation 7176.
 roots colonization, pure culture, sporulation, vesicular-arbuscular mycorrhizas, *Gigaspora margarita* 8481.
 seed germination biological control, seed treatments, *Agrobacterium radiobacter* extracellular polymers, polysaccharides, biological control, damping-off 6309.
 speck, detection, use, pages 8823.
 speck, factors affecting *Pseudomonas syringae* pv. *tomato* survival 276.
 speck, *Pseudomonas syringae* pv. *tomato*, acid rain 4554.
 stem canker, *Didymella lycopersici*, solar radiation, disease control 2847.
 tobacco mosaic virus infection, pathogenicity, cross-protection 8042.
 tobacco streak virus isolation, characterization, host range 4565.
 tomato bushy stunt virus infectivity, RNA cleavage 2013.
 tomato leaf curl virus infection, *Bemisia tabaci*, disease transmission, association, environmental factors 8022.
 tomato yellow mosaic virus infection, effects on metabolism 6265.
Verticillium dahliae wilt, disease resistance, plant breeding 2068.
Verticillium dahliae wilt, epidemiology, USA, North Carolina 5456.
Verticillium dahliae wilt predisposing factors, potassium, phosphorus 3833.
 vesicular-arbuscular mycorrhizas fungi, *Meloidogyne incognita*, mixed infection, phosphorus interaction 371.
 wilt, *Fusarium oxysporum* f.sp. *lycopersici*, factors affecting 5455.
 wilt, *Verticillium albo-atrum*, vesicular-arbuscular mycorrhizas inoculation effects on 1209.

Lycopercospora glandulorum,

- inheritance, disease resistance genes, *Pseudomonas syringae* pv. *tomato*, speck 2828.

Lycopercospora hirsutum,

- inheritance, disease resistance genes, *Pseudomonas syringae* pv. *tomato*, speck 2828.

Lycopercospora peruvianum,

- inheritance, disease resistance genes, *Pseudomonas syringae* pv. *tomato*, speck 2828.

Lycopercospora pimpinellifolium,

- inheritance, disease resistance genes, *Pseudomonas syringae* pv. *tomato*, speck 2828.

Lycorine,

- effects on coxsackievirus B2, poliovirus 1, herpes simplex virus 1 4021.

Lymantria dispar,

- biological control, pathogens, nuclear polyhedrosis virus propagation, association, bacteria, fungi 6907.
 epidemiology, nuclear polyhedrosis virus detection methodology, enzyme-linked immunosorbent assay 7561.
 larvae, biological control, pathogens, *Micrococcus pseudoflavifaciens* 5260.

Lyme disease,

- spirochaetes, endotoxins, *Limulus* lysate test 5385.

Lymphadenopathy virus,

- DNA polymerase (RNA-dependent), purification, characterization 5983.

Lymphoblastoid cell lines,

- (E)-5-(2-bromovinyl)-2'-deoxyuridine, antiviral activity, Epstein-Barr virus, infection 4027.

Lymphocyte B,

- Epstein-Barr virus transformed cells, production, monoclonal antibodies, association, *Plasmodium falciparum*, erythrocytes, man, methodology 633.
 function analysis, *Streptococcus pneumoniae* vaccines use, man, reviews 3356.

Lysaninamide,

- activity, lysine production, *Cryptococcus* 6034.

Lysine,

- bioavailability, single-cell protein, *Torulis utilis* 1730.
 biosynthesis, respiration (cyanide insensitive), *Brevibacterium flavum* 4267.
Lactobacillus plantarum, biosynthesis, colonization, gastrointestinal tract, feeds supplements, chickens 7010.
 levels, fermentation, temperature effects on, cornmeal, lactic acid bacteria 7881.
 production, activity, lysaninamide, L- α -aminocapro lactam hydrolase, *Cryptococcus* 6034.
 production, association pyruvate kinase, *Brevibacterium flavum* 1728.
 production, biotin nutrient requirements, *Brevibacterium lactofermentum* 6817.
 production, media (culture), *Brevibacterium* 6769.
 production, pyruvate kinase deficient mutant, *Brevibacterium flavum* 8527.
 production, respiration (cyanide insensitive), chemostats, *Brevibacterium flavum* 7669.
 streptothricin biosynthesis, *Streptomyces rochei* 3131.

L-Lysine,

- biosynthesis, *Corynebacterium glutamicum*, *Brevibacterium* 3405.
 biosynthesis, *Streptomyces albus* 3411.
 fermenters, sensors, use, immobilized enzymes electrodes, *Trichoderma viride* lysine 2-monooxygenase 38.
 production, carbon sources, *Corynebacterium glutamicum* 866.
 production, *Corynebacterium glutamicum*, *Brevibacterium flavum*, nitrogen sources, flour, *Psopocarpus tetragonolobus* 7670.
 production, hydrocarbons, carbon sources, nutrient requirements, *Arthrobacter globiformis* 4265.
 production, hydrocarbons utilization, *Micrococcus varians* 1732.
 synthesis, racemization, enzymes, bacteria 4.

p-Lysine,

- formation, *Streptomyces*, streptothricin F biosynthesis 4844.

Lysine amidase,

- activity, detection methodology, *Cryptococcus* 6822.

Lysine 2-monooxygenase,

- Trichoderma viride*, immobilized enzymes, electrodes, use, assays, L-lysine, fermenters 38.

Lysals,

- +centrifugation, blood culture, detection, bacteremia 755.
 +centrifugation, blood culture, isolation, *Mycobacterium chelonae* 1671.
 centrifugation, comparison, Bactec test, detection, bacteria, man 3313.
 +centrifugation, *Histoplasma capsulatum* blood culture recovery methodology 814.

Lysals, (continued)

- +centrifugation, isolation, yeasts, bacteria, blood culture 1529.
 centrifugation, recovery system, bacteria, fungi, clinical trials 4159.
Cochliobolus miyabeanus conidia, *Rhizoctonia solani* hyphae, soil microorganisms 8920.
 Mycobacteriales, biological control, plant diseases 8920.
 phase T40, *Escherichia coli*, contamination, petroleum recovery, rocks 3996.
 phases infected *Pseudomonas aeruginosa*, polymyxin B induction 4856.
Lysobacter enzymines,
 alkaline phosphatase, purification, characterization 3519.
 proteinase, substrate specificity, use amino acid sequence determination 939.
Lysogenization,
 phase λ , bacteria resistance, isolation methodology 5910.
Lysogeny,
Escherichia coli 4706.

Lysophospholipase,

- isoenzymes, C.D., fluorescence, penicillium notatum 7685.

- purification, characterization, *Vibrio vulnificus* 7676.

D-Lysopline dehydrogenase,

- activity, *Agrobacterium tumefaciens*, crown gall, plants 6274.

Lysosomes,

- incorporation, rabies virus membranes glycoproteins, antibody response, mice 6660.

Lysostaphin,

- use, antisepsis extraction methodology, *Staphylococcus aureus* 7578.

Lyszyme,

- binding, penicillins 9194.

- disaccharides tetrapeptides binding effects on tryptophan residues, fluorescence, phase T4 7706.

- +EDTA+tris, effects on drug sensitivity testing, antibacterial activity,

- Pseudomonas aeruginosa*, animal isolates, horses 2253.

- purification, characterization, C.D., *Streptomyces rutgersensis* 3458.

- purification, characterization, cell walls, *Sporobolomyces ruberrimus* 2585.

- purification, characterization, phase PL-1 induction, *Lactobacillus casei* 4284.

- Streptomyces rutgersensis*, characterization 6006.

- Streptomyces rutgersensis*, production, cultural characteristics 941.

Lytic enzymes,

- activity, *Bacillus circulans*+*Phaffia rhodozyma* mixed culture, carbon sources, relationship, astaxanthin extraction 1743.

- Bacillus subtilis*, enzymatic activity, *Clostridium saccharoperbutylacetonicum*, cell walls, peptidoglycans 5994.

- biosynthesis, bacteria 3481.

Lyticase,

- Oerskovia xanthineolytica*, use, yeasts RNA, DNA, isolation methodology 8492.

Macclain,

- production, *Sophora japonica* leaves, *Helminthosporium carbonum* inoculation 113

Machinery,

- harvesting, association, aerosols, particulate pollution, microorganisms, measuring techniques, mathematical models 3229.

Macromellins,

- structure, *Macrophoma commelinae* metabolites 2635.

Macrolide antibiotics,

- antibiotic resistance, *Mycoplasma*, animal isolates, chickens 3087.

- antibiotic resistance, plasmids, *Streptococcus*, host range 3025.

- antibiotic resistance, *Streptococcus pyogenes*, clinical isolates, serotypes 3018.

- biosynthesis, intermediates, nonactin, homononactin acid, *Streptomyces griseus* 6575.

- derivatives, L form, *Streptomyces hygroscopicus* 4799.

- derivatives, synthesis, association, tosylhydrazones, reduction 3174.

- epoxyenone, chemical modification, deoxygenation 5788.

- epoxyenone, deoxygenation, products, antibacterial activity 5789.

- potentiation, 9-(2-hydroxyethoxymethyl)guanidine, antiviral activity, pseudorabies virus 6475.

Macromolecules,

- biosynthesis, *Bacillus subtilis*, antibacterial activity, ravidomycin 4864.

- hydrolysis, cellulolytic microorganisms enzymes, pretreatment effects on 187.

Macromycin,

- structure, X-ray diffraction, *Streptomyces macromyceticus* 6558.

Macrophages,

- cell lines, *Escherichia coli* infected, phagocytosis, liposomes, containing streptomycin, chloramphenicol, antibacterial activity 513.

- guinea-pigs, intracellular killing, *Legionella pneumophila*, antibiotic sensitivity testing 6506.

- Mycobacterium leprae* cell culture, animals 7585.

- phagocytosis, *Cryptococcus neoformans*, staining, 1,6-dichloro-2-phenylindole)-fluorochrome, microscopy 2524.

Macrophoma commelinae,

- metabolites, macromellins structure 2635.

Macrophoma ipomoeae,

- infection, *Ipomoea fistulosa* 8017.

Macrophoma mangifera,

- antifungal activity, benlate, kocide 101, captan, dithane M45, brestan 4587.

Macrophoma zae,

- leafspot, Hungary, *Zea mays* 7969.

Macrophomina,

- infection, *Helianthus annuus*, pathogenesis, association developmental stages, irrigation effects on 1142.

Macrophomina phaseolina,

- charcoal rot, *Cucumis melo*, pathogenesis 2033.

- charcoal rot, disease resistance, *Sorghum bicolor* 8890.

- charcoal rot, Glycine max, *Bradyrhizobium japonicum*, rhizobitoxine, role, protection 4509.

- charcoal rot, *Helianthus annuus*, etiology 4551.

- immobilized enzymes, cellulolytic enzymes, hemocellulase 8571.

- infection, Glycine max, pathogenicity 240.

- latent infection, sclerotia soil levels, *Euphorbia lathyris*, weeds, USA, Arizona 8044.

- mycelia survival, association, crop residues soil amendment 2133.

- plant diseases pathogenicity, fungicides effects on 7211.

- sclerotia viability, soil solarization effects on 6302.

- soil-borne diseases, disease control, solar radiation 2845.

- survival, seeds, *Helianthus annuus*, pathology 8026.

- Mycorrhizae**,
lignocellulose, biodegradation, microorganisms 2704.
- Mycophthoria** sanborni,
biological control, benomyl foliar applications effects on 6091.
- Microzamia communis**,
seedlings, nodulation, symbionts 2907.
- Magnesium**,
association, production, anaerobic conditions, media (culture), anaerobic bacteria 7623.
- Magnesium**,
cations, effect on streptomycin antifungal activity, Phytophthora infestans 7379.
- Magnesium**,
+coupling factor 1,
effects on p-hydroxybenzoic acid esters antibacterial activity, Escherichia coli heat treatments 3055.
- Magnesium**,
effects on Rhizobium meliloti nitrogen fixation, symbiosis, Medicago sativa 2960.
- Magnesium**,
interaction inorganic pyrophosphatase, X-ray scattering, yeasts 3487.
- Magnesium**,
nutrient requirements, Aspergillus aflatoxins biosynthesis 7068.
- Magnesium**,
release, Bacillus, antibacterial activity, sodium citrate 7375.
- Magnesium**,
release, spores, sodium citrate antibacterial activity, Bacillus 7375.
- Magnetic fields**,
immunoelectron microscopy, viruses, grids, rotation, effects on 9273.
- Magnolia**,
Sassafras randainae, isolation, chemical properties 454.
- Maharaja**,
biological control, Metarhizium anisopliae inoculum production, factors affecting 5266.
- Maillard reaction**,
products, role growth inhibition, Bacillus subtilis, Escherichia coli, Purphococcus aureus 7367.
- Maize**,
sugars fermentation, ethanol production, Saccharomyces cerevisiae 8662.
- Maize dwarf mosaic virus**,
disease resistance, field trials, plant breeding, Zea mays 5495.
- Maize**,
disease resistance transfer, genetic analysis, Zea mays 4584.
- Maize**,
disease resistance, Zea mays germplasm comparison 8081.
- Maize**,
Zein, Zea mays, disease resistance, genetic control 2638.
- Maize**,
monoclonal antibodies production, use radioimmunoassay, diagnosis, plant diseases 4998.
- Maize streak virus**,
disease transmission, Auchenorrhyncha, Zea mays 7154.
- Major histocompatibility complex**,
purification, adjuvants, immunogenicity, vaccines 6589.
- Malachite green**,
staining, detection, bacteria, sewage treatment 2331.
- Malate dehydrogenase**,
activity, activated sludge 6686.
- Malate dehydrogenase**,
activity, cell permeability, continuous culture, Saccharomyces cerevisiae 3592.
- Malate dehydrogenase**,
activity, ethanol production, malic acid conversion, Saccharomyces cerevisiae 4409.
- Malate dehydrogenase**,
kinetics, poly(ethylene glycol) bound NAD⁺ derivatives effect on, Bacillus stearothermophilus, Thermus thermophilus, yeasts 76.
- Malate dehydrogenase**,
oxaloacetic acid binding, kinetics, Phycococcus blakesleeanus 3454.
- Malate dehydrogenase**,
purification, characterization, comparison, Humicola lanuginosa, Mucor pusillus 4409.
- Malate dehydrogenase (oxaloacetate-decarboxylating) (NADP⁺)**,
purification, characterization, Pseudomonas putida 5140.
- Malaysia**,
Coffea, Hemiteia vastatrix rust, Verticillium psalliotae hyperparasitism 1204.
- Malaysia**,
Shorea seedlings, ectomycorrhizas 7230.
- Malic acid**,
assimilation, malolactic fermentation, Leuconostoc oenos, transformation, Escherichia coli 3627.
- Malic acid**,
conversion, ethanol production, activity, malate dehydrogenase, alcohol dehydrogenase, Saccharomyces cerevisiae 4409.
- Malic acid**,
lactic acid, genes, Lactobacillus delbrueckii, cloning, Escherichia coli, Saccharomyces cerevisiae, role, wine, fermentation 2681.
- Malic acid**,
levels, monitoring, malolactic fermentation, wine 8665.
- Malic acid**,
metabolism, silage, lactic acid bacteria 6200.
- L-Malic acid**,
decomposition, Botrytis cinerea, musts, organoleptic evaluation, wine 8666.
- L-Malic acid**,
production, fumarate hydratase activity, Escherichia coli 6877.
- L-Malic acid**,
production, fumaric acid conversion, fumarate hydratase, immobilized cells, Thermus rubens sp. nov. 9.
- Malignancy**,
children, infection prophylaxis, laminar air flow, nosocomial environments 576.
- Maliotus**,
bark, nitrogen-fixing bacteria activity 8147.
- Maliotus**,
bark, nitrogen-fixing bacteria activity, atmospheric pressure, oxygen, effects on 8148.
- Malolactic fermentation**,
activity purification, affinity chromatography, Leuconostoc oenos 8600.
- Malolactic fermentation**,
2,3-butanediol levels, wine, Leuconostoc oenos 2693.
- Malolactic fermentation**,
immobilized cells, Leuconostoc oenos 5931.
- Malolactic fermentation**,
malic acid assimilation, Leuconostoc oenos, transformation, Escherichia coli 3627.
- Malolactic fermentation**,
malic acid, tartaric acid, levels, monitoring, wine 8665.
- Malolactic fermentation**,
musts, acetic acid bacteria, Gluconobacter oxydans, Acetobacter acetii 6936.
- Malolactic fermentation**,
musts, organoleptic evaluation, wine, Leuconostoc oenos 2692.
- Malolactic fermentation**,
wine, Leuconostoc oenos, viability 6125.
- Malolactic fermentation**,
wine production, lactic acid bacteria, reviews 173.
- Malolactic fermentation**,
wine, starter cultures, drying, storage, viability, Leuconostoc oenos 7816.
- Malopentose**,
 α -amylase production, Bacillus circulans 1763.
- Malpighia**,
formation, glucose conversion, exo-1,4- α -D-glucosidase, kinetics, Rhizopus niveus, Aspergillus niger 3474.
- Malpighia**,
hydrolysis, exo-1,4- α -D-glucosidase, Aspergillus niger 3473.
- Malpighia**,
hydrolysis, exo-1,4- α -D-glucosidase, immobilized enzymes, Rhizopus niveus, reactors 112.
- Malpighia**,
production, β -amylase reviews, α -D-glucosidase applications, Bacillus licheniformis, Bacillus amyloliquefaciens 4360.
- Malpighia**,
ligands binding, Escherichia coli 1726.
- Malotetraose**,
 α -amylase production, Bacillus circulans 1763.
- Maltotriose**,
hydrolysis, exo-1,4- α -D-glucosidase, Aspergillus niger 3473.
- Malus**,
canker, Valsa mali, disease control, antibiotics + copper sulfate 8139.
- Malus**,
canker, virulence, Pseudomonas syringae pv. syringae 8810.
- Malus**,
crop residues, fermentation, ethanol production 3653.
- Malus**,
crown rot, Phytophthora cactorum, antagonists, bacteria, effects on pathogenesis 5511.
- Malus**,
overwintering, Pseudomonas syringae pv. papulans, Pseudomonas syringae pv. syringae 6252.
- Malus**,
plant viruses infection, long-term effects 6250.
- Malus**,
powdery mildew, Podosphaera leucotricha, disease control, fungicides 5516.
- Malus**,
scab, Venturia inaequalis, sterol inhibitors, disease control 3881.
- Malus**,
Venturia inaequalis overwintering 2001.
- Malus domestica**,
buds, infection, Botryosphaeria obtusa 4527.
- Malus domestica**,
endomycorrhizas effects on growth, association, clays media 2136.
- Malus domestica**,
Eutrypa americana isolation, USA, Washington, in vitro, pathogenicity, cultural characteristics 2005.
- Malus domestica**,
powdery mildew, Podosphaera leucotricha, temperature effects on, dormancy 7985.
- Malus domestica**,
roots colonization, vesicular-arbuscular mycorrhizas 8218.
- Malus domestica**,
seedlings growth, phosphorus uptake, stimulation, Glomus mosseae 3942.
- Malus floribunda**,
leaves, Venturia inaequalis pathogenicity, growth 7988.
- Malus pumila**,
bioassays, crown gall, disease control, streptomycin, vancomycin, CGA 78039 343.
- Malus pumila**,
blister spot, Pseudomonas syringae var. papulans, pathology, Italy 7161.
- Malus pumila**,
canker, Botryosphaeria dothidea, disease control, benomyl, pruning, USA, Georgia 3900.
- Malus pumila**,
disease resistance, Venturia inaequalis scab, plant breeding 2835.
- Malus pumila**,
Erwinia amylovora, virulence, characterization 2803.
- Malus pumila**,
fruit rot, Alternaria 7986.
- Malus pumila**,
seedlings growth, phosphorus uptake, stimulation, Glomus mosseae 3942.
- Malus pumila**,
Botryosphaeria ribis 2799.
- Malus pumila**,
fruits, susceptibility, Venturia inaequalis scab, role, age, temperature, water availability 2797.
- Malus pumila**,
host plants, fireblight, reviews 7166.
- Malus pumila**,
leaves, bark, roots, tomato ringspot virus distribution 7994.
- Malus pumila**,
Phoma violacea post-harvest decay, pathogenicity 2053.
- Malus pumila**,
rhizosphere, soil microorganisms composition, phytotoxins toxicity 2146.
- Malus pumila**,
rootstocks, Agrobacterium tumefaciens serotyping, crown gall 270.
- Malus pumila**,
rootstocks, crown gall, disease control, streptomycin, CGA 78039 342.
- Malus pumila**,
scab, capitan use disease control, residues 8925.
- Malus pumila**,
seedlings, Phytophthora cactorum crown rot, biological control, antagonism, Bacillus subtilis 7212.
- Malus pumila**,
tissue culture, Erwinia amylovora infection, extracellular polymers, polysaccharides, characterization 1835.
- Malus sylvestris**,
buds, black rot, Botryosphaeria obtusa 7996.
- Malva parviflora**,
cotton leaf crumple disease, virus-like particles etiology, epidemics, USA, Arizona 8814.
- Malva parviflora**,
cytopathology, abutment mosaic virus 8815.
- Malva sylvestris**,
cytopathology, abutment mosaic virus 8815.
- Malva sylvestris**,
Malva sylvestris, coromandelianum, plant diseases, okra mosaic virus, epidemiology, Nigeria 6262.
- Mamestra configurata**,
larvae, food, bioassays, t-2 toxin 3731.
- Mammalia**,
dissemination, Calloscypha fulgens, pathogens, Picea glauca, Pinus contorta, Pseudotsuga menziesii, Canada 7237.
- Mammalian cells**,
cell culture, vesicular stomatitis virus infection, insecticides, emulsifiers, solvents effects on 2434.
- Mammalian cells**,
cell lines, use, enterovirus, isolation, waste water 4150.
- Mammalian cells**,
comparison, Aves cells, cell culture, reovirus (avian) 5001.
- Mammalian cells**,
experimental infection, nuclear polyhedrosis virus, pathogens, biological control, pests 6696.
- Mammalian cells**,
gene transfer, use Sendai virus envelopes carriers 630.
- Mammalian cells**,
herpesvirus DNA detection, electrophoresis 4977.
- Mammalian cells**,
interferon, antiviral activity, recombinant, DNA 4778.
- Mammalian cells**,
transfection, papilloma virus (bovine) cloning vectors 629.
- Mancoszeb**,
+cupric hydroxide, disease control, bacteria speck, Lycopersicon esculentum 6310.
- Mancoszeb**,
+curzate antifungal activity, phytopathogenic fungi 2085.
- Mancoszeb**,
disease control, Phytophthora infestans, late blight, Lycopersicon esculentum 1206.
- Mancoszeb**,
disease control, Phytophthora infestans, late blight, Solanum tuberosum 8926.
- Mancoszeb**,
disease control, Rhipsalis salivus, white rust, downy mildew 2902.
- Mancoszeb**,
inhibition, ectomycorrhizas, non-target organisms, seedlings, Pinus sylvestris 5570.
- Mancoszeb**,
 \pm metalaxyl, Pythium ultimum, decline, Vitis vinifera 8122.
- Mancoszeb**,
role, Colletotrichum gloeosporioides polygalacturonase inhibition 1224.
- Mancoszeb**,
seed treatments, seed-borne diseases, Cosmos 8142.
- Mandibular glands**,
secretions, antimicrobial activity, soil microorganisms, Calomymex 3069.
- Manduca sexta**,
biological control, pathogenicity, Pseudomonas aeruginosa cytotoxins, reviews 5211.
- Manganese**,
bioaccumulation, wood, fungi white rot 7240.
- Manganese**,
biogeochemistry, microorganisms, reviews 8209.
- Manganese**,
biomass levels, nutrient cycles, soil microorganisms 6347.
- Manganese**,
deficiency, effects on, Brevibacterium ammoniagenes, Micrococcus luteus, DNA synthesis, precursors, nucleosides, fermentation 951.
- Manganese**,
deficiency, Trichium aestivum, effects on disease resistance, take-all, Gaeumannomyces graminis 8099.
- Manganese**,
effects on Rhizobium leguminosarum var. trifolii inoculation, nodulation, Trifolium repens 7278.
- Manganese**,
interaction inorganic pyrophosphatase, X-ray scattering, yeasts 3487.
- Manganese**,
nutrient requirements, Aspergillus aflatoxins biosynthesis 7068.
- Manganese**,
nutrient requirements, patulin biosynthesis, media (culture), Penicillium urticae 5796.
- Manganese**,
nutrient uptake, rhizosphere microorganisms, plants 5827.

Mangnese, (continued)

nutrient uptake, stimulation, vesicular-arbuscular mycorrhizas, *Arachis hypogaea* 5641
oxidation, reduction, valency, bacteria, soil 6386
removal, ores, *Achromobacter* 1287.

Mangifera indica,

anthracnose, *Colletotrichum gloeosporioides* var. minor, epidemiology 7159.
leafspot, *Zimmermanniella trispota* 8808.
wilt, *Ceratocystis fimbriata*, disease control, pruning, disease resistance
rootstocks, Brazil 5440.

Mangostin,

derivatives, isolation, *Garcinia mangostana*, antimicrobial activity 4783.

Manihot esculenta,

fermentation, ethanol, *Rhizopus koji* 3610.
oxalic acid levels, fungi infection 6281.
phyllody, *Mycoplasma*-like organisms, Colombia 8027.
plant breeding, cultivars, disease resistance, blight, *Xanthomonas campestris* pv. *manihoti*, isolation, *Elsinoe brasiliensis* 5497.
yield, fertilizers requirements, inoculation, *Glomus manihotis* 2934.

Mannans,

biocconversion, β -1,4-mannooligosaccharide biosynthesis, *Streptomyces* β -D-mannosidase 1745.
hydrolysis, actinomycetes β -D-mannosidase, *Cocos nucifera* 8604.
Saccharomyces cerevisiae, linkage, site location 5203.

o-Mannans,

localization, *Phytophthora megasperma* f.sp. *glycinea*, hyphae, host-pathogen interactions, *Glycine max* 7941.

Mannitol,

inhibition ethanol fermentation, corn, *Saccharomyces cerevisiae* 2678.
Lactobacillus plantarum biodegradation, *Phaseolus vulgaris* beans, *Lactobacillus caldosus* fermentation 7003.

Mannitol-1-phosphate dehydrogenase,

purification, characterization, *Escherichia coli* 8555.

D-Manno-D-glucan,

carbohydrate composition, *Microlellobosporia grisea*, structure-activity relationships, antifungal activity, solid tumors, mice 4376.

 β -1,4-Mannooligosaccharide,

biosynthesis, mannans biocconversion, *Streptomyces* β -D-mannosidase 1745.

Mannose,

conjugates, nodules, *Glycine max*, *Bradyrhizobium japonicum* 6362.
Fusarium oxysporum fermentation 1860.

 α -D-Mannosidase,

production, *Nocardia erythropolis* 914.

 β -D-Mannosidase,

actinomycetes, hydrolysis, mannans, *Cocos nucifera* 8604.
enzymatic activity production, *Cellulomonas growth*, carbohydrates substrates 32.
Streptomyces β -1,4-mannooligosaccharide biosynthesis, mannans biocconversion 1745.

Mancochloramine,

disinfectants, antibacterial activity, antifungal activity 5865.

Mansoma uniformis,

biological control, pathogens, *Bacillus thuringiensis* 123.

Mansonia,

isolation, antifungal activity, role disease resistance, *Ceratocystis ulmi*, Dutch elm disease, *Ulmus americana* 3926.

Manure,

afatoxin B1 levels, temperature, humidity effects on, chickens 6208.
chickens, digestion (anaerobic), waste treatment, methanogenesis, immobilized cells 7518.
composts, soil amendment, effects on population levels, soil microorganisms 3972.
digestion (aerobic), effects on nutritive value, feeds, chickens 6201.
digestion (aerobic), waste treatment 9230.
digestion (anaerobic), thermophilic bacteria, mesophilic bacteria, methane production 7523.
digestion (anaerobic), waste treatment, cattle 9226.
effects on, nitrogen fixation, soil, *Triticum aestivum*, *Oryza sativa* 8384.
effects on rhizosphere soil composition, *Triticum aestivum*, *Oryza sativa* 2996.
methanogenesis, digestion (anaerobic), reactors design 5824.
pigs, γ radiation inactivation, viruses 4087.
slurries, chickens, methanogenesis 7306.
soil amendment, fecal coliforms, coliforms, drainage, water quality, crop fields 6709.

starter cultures, waste treatment, methanogenesis, methanogenic bacteria 2340.

Marsamilius,

stalk rot, leafspot, *Zea mays*, Mexico 8794.

Marsamilius ramselli,

5-methoxycarbonyl-7-formyl-1-benzoxepin-5(2H)-one isolation, synthesis 5253.

Marsamilius androsaceus,

competition, *Mycena galopus*, decomposition, leaf litter, *Onychiurus latus* grazing effects on, *Picea sitchensis* 8940.

vertical distribution, soil, *Onychiurus latus* grazing effects on, forests, *Picea* sitchensis 8939.

Marek's disease virus,

infectious bursitis virus, herpesvirus (turkey), live combined vaccines production, embryo fibroblasts, chickens 7486.

Maridomycin,

conversion, antibacterial activity, *Serratia marcescens* 3161.

Marine bacteria,

biodegradation, putrescine, cadaverine, sea water, media (culture) 3676.
preservation, iodine, solutions 6760.
toxicity, petroleum, photooxidation 6664.

Marine environment,

bacteria, fouling organisms, species composition 1040.
chemical pollution toxicity, genetic engineering microorganisms release, role, biodegradation 3681.
enterovirus levels, measuring techniques 7532.
fecal coliforms, measuring techniques 2390.
indicator species, inactivation, waste water 1499.
indicator species survival, *Escherichia coli*, *Streptococcus* 2395.
isolates, Penicillium, yeasts, biodegradation, oil 7310.
isolation, *Vibrio parahaemolyticus*, media (enrichment), media (isolation) 7619.
oil spills, biodegradation, enzymes, microorganisms 180.
samplers, bacterioplankton, water stratification 1611.
sediments, indicator species, isolation, *Streptococcus*, incubation temperature

Marine environment, (continued)

8422.
Spartina alterniflora, *Juncus roemerianus*, *Pinus Elliotti*, lignin, mineralization, fungi, role 1026.

Marine microorganisms,

alginate lyase, isolation, characterization 3503.
decarboxylation, phthalic acid, biodegradation 998.
DNA biosynthesis, RNA biosynthesis, measuring techniques, methodology 4143.
hydrogen production 3582.

Marine pollution,

coastal waters, *Candida*, indicator species 2399.
indicator species, *Escherichia coli*, *Streptococcus*, survival 2395.
indicator species, sewage sludge, ocean dumping 2389.

Marssonina,

plant diseases, *Populus*, pathogenesis 5596.
Marssonina balsamiferae sp. nov.,
taxonomy, etiology, leafspot, *Populus balsamifera*, Canada 3913.

Marssonina brunnea,

host range, pathogenicity, *Populus* 357.
infection, *Populus* deicides, prophylaxis relationship fungicides seed treatments 2112.
infection, *Populus*, transmission (seed) 2113.

Marssonina castagnei,

host range, pathogenicity, cultivars, *Populus* 365.

Mass spectroscopy,

afatoxin B1, aflatoxin B2, peanuts 6206.
antibiotic FF-900109, *Streptomyces puniceus*, biosynthesis, antibacterial activity, gram-negative bacteria 1435.
computer applications, fermentation monitoring 170.
dissolved oxygen, media (culture), fermenters 5873.
methodology, gases determination, microorganisms culture systems 4144.
monitoring, methanogenesis, digestion (anaerobic), waste treatment 1458.
nickel tetraphenyl colator F430 multiple forms, comparison, *Methanobacterium* thermoautotrophicum 4291.
nitrogen-15, biomass measuring techniques, lignocelluloses fermentation, *Chaetium cellulolyticum* 5310.
ornithine containing lipids, *Thiobacillus thiooxidans* 5024.
penicillins 2267.
penicillic acids 4831.
pyrolysis products, identification, *Bacillus* 5052.

Mass transfer,

enzymes bioreactors, mathematical models 6026.

Massarina aquatica,

infection, wood, antagonism, fungi 2110.

Mastitis,

animal isolates, antibiotic resistance, *Streptococcus agalactiae*, *Staphylococcus aureus*, *Streptococcus* 10083.
cattle, *Staphylococcus aureus* isolates, enterotoxins production, coagulase analysis 231.
clinical isolates, *Staphylococcus*, *Streptococcus*, antibiotic sensitivity testing, buffaloes 4810.
disease control, correlation, cow's milk, penicillin, quinaldofur, antibacterial activity, *Staphylococcus*, *Streptococcus* 5773.
disease control, milking machines, cattle 5711.
disease control, milking machines disinfection, cattle 9260.
prophylaxis, iodine, teat dips, cattle 4959.

Mathematical models,

activated sludge 6692.
activated sludge digestion (anaerobic), kinetics, wastewater treatment 4900.
activated sludge kinetics 544.
activated sludge kinetics, dissolved oxygen levels 1464.
asynchronous cell division, continuous culture, *Escherichia coli* 9294.
bacteria, energy requirements, nutrient requirements, association, monomers biosynthesis, excretion 8512.
biomass, age distribution, fermentation 6129.
bulking, sedimentation, flocculation, activated sludge 6687.
carbon cycle, nitrogen cycle, soil microorganisms 3938.
carbon cycle, nitrogen cycle, soil microorganisms 5636.
cell culture, batch culture, *Saccharomyces cerevisiae* 8503.
cellulase activity, measuring techniques 911.
cellulolytic enzymes, hydrolysis, wood, *Populus* 8539.
chemostats, microorganisms 9269.
computer applications, glucose nutrient deficiency, growth, *Escherichia coli* 4173.
computer applications, growth, bacteria 4172.
continuous culture, fermentation, ethanol production 6137.
continuous culture, fermentation, oscillations, levels, substrates, biomass 5280.
diffusion, immobilized cells, microorganisms, factors affecting 1528.
digestion (anaerobic), monitoring, computer applications, wastewater treatment 6705.
digestion (anaerobic), wastewater treatment 9235.
digestion (anaerobic), wastewater treatment, bioreactors 558.
disease spread, plant diseases, phytopathogenic fungi 7127.
dispersal, spores, *Bacillus thuringiensis* 3544.
dissolved oxygen diffusion, activated sludge 9239.
dissolved oxygen levels, fermentation 8502.
dissolved oxygen, oxygen consumption, activated sludge 6690.
dissolved oxygen transfer, kinetics, fermentation 6118.
ectomycorrhizal colonization, roots, forestry 5577.
energetics, *Escherichia coli* biomass formation, bioreactors 588.
epidemiology, plant diseases 8766.
ethanol fermentation, immobilized cells fermenters 156.
fermentation, continuous culture, ethanol production, oscillations, *Saccharomyces cerevisiae* 6119.
fermentation, continuous culture, optimization, methodology 7805.
fermentation, laboratories, correction 2676.
fermentation, monitoring 6139.
fermentation, optimization, computer applications 6133.
fermentation, proteins distribution, flow cytometry, growth, *Saccharomyces cerevisiae* 6126.
fermentation, thermodynamics, *Clostridium* 3549.
fermentation, pure culture, mixed culture, fermenters, microorganisms 9270.
films, substrates kinetics, wastewater treatment, microorganisms 1461.
gibberellic acid biosynthesis, whey fermentation, *Fusarium moniliforme* 5970.

Mathematical models, (continued)

glucose metabolism, single-cell protein production, *Chaetomium cellulolyticum* 5998.
growth, bacteria, yeasts 1530.
growth, fermentation, glucose metabolism, *Saccharomyces cerevisiae* 6121.
growth, Michaelis-Menten parameters, microorganisms 7654.
growth, population dynamics, microorganisms 5953.
heat production, composts, *Basidiomycetes* 4463.
immobilized enzymes, immobilization methodology, supports, penetration 8550.
kinetics, *Trichoderma* hydrolysis cellulose, glucose formation 1798.
Lactobacillus casei, tetrahydrofolate dehydrogenase inhibition, X-ray diffraction 4323.

mass transfer, enzymes bioreactors 6026.

mass transfer, glucose isomerase, immobilized enzymes, reactors, *Streptomyces* 5168.

measuring techniques, harvesting machinery, association, aerosols, particulate pollution, microorganisms 3229.

methane production, bacteria, animal wastes fermentation, kinetics 9033.

methanogenesis, digestion (anaerobic), animal wastes, chickens 8394.

microorganisms growth, kinetics, association, fermentation 2530.

monitoring, computer applications, fermentation 6115.

monitoring, methanogenesis, digestion (anaerobic) 5702.

nitrification inhibition, arsenic, chromium, fluoride 2358.

nitrogen cycle, soil microorganisms, forests 8146.

optimization, ethanol production, fermentation, bioreactors, *Saccharomyces cerevisiae* 6138.

optimization, fermentation, production, glutamic acid, ethanol, *Saccharomyces cerevisiae*, *Brevibacterium divaricatum* 5964.

pasteurization, oil, emulsions, antimicrobial activity, bacteria,

biodeterioration 1297.

phytopathogenic fungi, host-pathogen interactions, population density, disease resistance, plant diseases 2772.

production, acetone, butanol, ethanol, *Clostridium acetobutylicum* 976.

protein hydrolysis, proteinase, immobilized enzymes, bioreactors, crop residues, *Penicillium dupontii* 3475.

Rhizobium leguminosarum growth, soil, inoculum size association 9012.

Rhizopus thailandensis, immobilized cells, bioreactors,

exo-1,4- α -D-glucosidase, production 7729.

single-cell protein production, bagasse hydrolysis, cellulolytic bacteria 4353.

single-cell protein production, optimization, cost-benefit analysis,

fermentation, *Hansenula polymorpha*, *Methylomonas* 5963.

statistical analysis, fermentation 6141.

sulfur removal, coal, *Thiobacillus ferrooxidans* 5694.

surfaces colonization, continuous culture, *Pseudomonas aeruginosa* 5059.

transient microorganisms, growth 587.

wastewater treatment 9228.

yogurt production, lactic acid bacteria 6190.

Mating factor,

purification, amino acid sequence, *Saccharomyces kluyveri* 3410.

Matting types,

Heterobasidion annosum, genetic markers, epidemiology, plantations, *Pinus* 367.

Microsporium gypseum, ecological distribution, soil, Spain 8990.

Matricaria chamomilla,

plant extracts, antiviral activity, herpesvirus, poliovirus 2 8325.

Matricaria inodora,

plant extracts, antiviral activity, herpesvirus, poliovirus 2 8325.

Maturity,

effects on *Hyphophora*, black pod, *Theobroma cacao* 7993.

Maxilla

surgery, oral hygiene effects on, dental plaque, gingivitis, man 6726.

Mayonnaise,

salt dressings, microorganisms contamination 7847.

McCoy cells,

cycloheximide treatment, +periodic-acid-Schiff stain, use, diagnosis isolation, *Chlamydia trachomatis* 3294.

monolayers, *Chlamydia trachomatis* cell culture, recovery methodology 1602.

monolayers, use, *Clostridium difficile* toxins detection 4478.

trifluoperazine, inhibition, *Chlamydia trachomatis*, infectivity 450.

use, isolation, cell culture, *Chlamydia trachomatis*, methodology 790.

MDCK cells,

varicella, inhibition, Influenza A virus, replication 8331.

Meals,

corn, fermentation, vitamins levels, lactic acid bacteria 5356.

Gossypium hirsutum seeds, food contamination, aflatoxins, detoxification methodology 7081.

peanuts, aflatoxins food contamination, decontamination methodology use

methylinamine + calcium hydroxide 7097.

peanuts, corn, detection aflatoxins food contamination, methodology comparison 7066.

rapeseed, glucosinol, goitrin, biodegradation, *Bacillus cereus*, *Trichosporon cutaneum* 1042.

soybeans+corn, fermentation effects on amino acid composition, lactic acid

bacteria 5357.

soybeans+corn, fermentation effects on nutritive value, minerals, lactic acid

bacteria 5355.

soybeans, cottonseed, *Aspergillus flavus* aflatoxins production 3746.

soybeans, *Rhizopus oligosporus* fermentation, characterization 7016.

Measles virus,

antiviral activity, pyrazolo[3,4-d]pyrimidine-4(5H)-selone nucleosides

9119.

budding inhibition, role, trifluoperazine, chlorpromazine 471.

hemagglutinins, immunoglobulin G detection, enzyme immunoassay methodology 8442.

immunity detection, enzyme-linked immunosorbent assay, man 4168.

immunoglobulin M detection, monoclonal antibodies use, immunoassay, man 644.

infected cells, potassium thiocyanate, staining, removal, use, immunofluorescence

1538.

proteins, isoelectric focusing 2558.

purification, tissue culture, HeLa cells 5005.

Meat,

bacteria contamination, spoilage, sampling, methodology 3715.

bacteria growth, temperature range analysis 1061.

contamination, bacteria enumeration methodology, ATP measurements 3304.

Meat, (continued)

food contamination, *Cryptococcus laurentii* var. *laurentii*, effects on flavor,

association freezing 3702.

food contamination, molds, growth conditions 6193.

freezing, bacteria enumeration methodology 1060.

isolates, animal isolates, *Salmonella* antibiotic resistance 8441.

isolation, *Salmonella*, serotypes, biotypes 6963.

lactic acid bacteria food contamination, reviews 209.

production, starter cultures 5322.

reprocessing, bacteria contamination, poultry 2738.

spoilage, bacteria 3711.

spoilage, bacteria, refrigeration 3712.

spoilage, bacteria, role food poisoning 3713.

spoilage, contamination, bacteria, books 4424.

spoilage, microorganisms, books 1689.

vacuum packaging, lactic acid bacteria, taxonomy (numerical) 4446.

Meat industry,

by-products, contamination 3710.

by-products, contamination 3710.

cleaning systems, bacteria contamination, carcasses, turkeys, meat industry 1053.

food processing, bacteria contamination 3706.

food processing, poultry, hygiene, bacteria contamination 3707.

food processing, poultry, *Staphylococcus aureus* contamination, biotyping 6179.

hygiene, contamination, sampling 3714.

industrial effluents, wastewater treatment, bioreactors, anaerobic conditions,

pH, temperature, chemical oxygen demand effects on 3196.

poultry carcasses, contamination, coliforms 1051.

wastewater treatment, reviews, bibliographies 4912.

Meat production,

pork, microorganisms counts 7841.

Meat products,

cured products, food processing, spoilage, contamination, bacteria 3708.

dry, flavor compounds production, role microorganisms 3700.

lactic acid bacteria food contamination, reviews 209.

poultry, bacteria contamination 1049.

poultry, spoilage, psychrotrophic bacteria, temperature, shelf life 6972.

quality, amines detection, bacteria food contamination 6196.

starter cultures, lactic acid bacteria 6961.

starter cultures, *Penicillium* 7840.

Meclizine,

antibacterial activity, inhibition, β -lactamase 6532.

antibiotic sensitivity testing, *Escherichia coli* 7440.

Citrobacter freundii resistance, incidence 6416.

effects on *Escherichia coli* cell division, conditional mutant 3102.

Media,

agar, comparison, anaerobic bacteria identification methodology 1644.

agar, novobiocin susceptibility, *Staphylococcus aureus* 1422.

antibiotic sensitivity testing, production 9152.

2,2'-azino-di(3-ethyl) benzothiazoline-6-sulfonic acid + horseradish peroxidase,

bacteria detection, hydrogen peroxide production 5900.

blood culture, bacteremia detection, Bactec test 7572.

blood culture, comparison 7626.

bromide, *Actinosporangium vitaminophilum* pyrrolomycin F derivatives biosynthesis,

antibacterial activity, antifungal activity 2295.

Butyribacterium methylotrophicum, use, titanium(III) nitriolacetic acid 769.

comparison, serum bactericidal activity, antibiotic sensitivity testing,

Staphylococcus aureus, infection, man 4788.

effects on *Streptococcus* group D cephalosporins antibiotic sensitivity testing

3095.

fermentation, *Bacillus thuringiensis*, sporulation, toxins biosynthesis 6070.

fibrinogen agar, *Staphylococcus aureus* enumeration methodology, food

contamination 6183.

gelatin agar, methodology, use, detection, anaerobic bacteria gelatinase 2457.

liquid culture, *Candida* comparison *Trichomonas vaginalis*, isolation 8482.

methylcellulose, use, plaque assay, murine leukemia virus 2444.

methylumbelliferyl- β -D-glucuronide, *Escherichia coli* isolation,

identification 5050.

nutrients, tobramycin biosynthesis, *Streptomyces cremus* subsp. *tobramycin* 2313.

oxidation fermentation, acid production detection, *Neisseria*, *Branhamella*

catalhensis 1658.

peat hydrolysates, *Aureobasidium pullulans*, pullulan biosynthesis optimization

6055.

preservation, *Campylobacter jejuni* 5043.

Spiroplasma citri, stumpy *Spiroplasma*, growth, methodology 3266.

synthetic, growth, fungi, gram-negative bacteria, use, antibiotic sensitivity

testing 9155.

use, antibiotic sensitivity testing, bacteria 9151.

use, detection, bacteria biodegradation *heparin*, chondroitin sulfate 9293.

Media (culture)

agar, photocoagulation, *Campylobacter fetus* 4210.

Alternaria carthami sporulation, induction methodology 4223.

amino acid composition 1536.

amino acid composition, gas chromatography 6733.

anaerobic bacteria, anaerobic conditions, production, association, magnesium

7623.

aniline blue, Legionella, identification 715.

Bacillus amyloliquefaciens, endonuclease BamH1, production 8549.

Bacillus spheargicus, growth, sporulation, larvicides activity 127.

bacteria 4187.

bacteria, hyaluronidase activity determination, turbidity methodology 3265.

bacteria, oxygen adsorption rates, aeration column, sewage treatment 3291.

bagasse hydrolysis, single-cell protein production, mathematical models,

cellulolytic bacteria 4353.

batch culture, inoculum production, *Rhizobium leguminosarum* var. *phaseoli* 5058.

biochemical analysis, automated methods, monitoring, fermentation 6142.

biotin biosynthesis, *Rhizopus delemar* 3579.

blood culture, bacteremia detection 1604.

carbon sources, effects on autolysis, dairy starters, *Streptococcus* group N 2733.

chemical composition, colonial characteristics, *Neisseria gonorrhoeae* 3341.

Chlamydia trachomatis, +temperature, effects on storage 5079.

Clostridium difficile, recovery, surfaces 1592.

Clostridium sporogenes spores 4207.

Clostridium thermocellum 7602.

composition, effects on, *Streptomyces griseus*, *Streptomyces lactamurans*,

cephamycins, biosynthesis 6517.

cotrimoxazole, drug sensitivity testing, bacteria 2217.

Media (culture), (continued)

drug sensitivity testing, methodology, bacteria 7629.
effects on pathogenicity, *Corynebacterium sepedonicum*, ring rot, *Solanum tuberosum* 7999.
γ-endotoxin production, *Bacillus thuringiensis* var. *kurstaki* 7786.
enumeration, *Staphylococcus aureus*, swimming pools, methodology 1822.
enumeration, titanium citrate, reducing agents, inhibition, growth, anaerobic bacteria, rumen 9301.
Erwinia herbicola detection, feces, man 1659.
factors affecting survival, *Campylobacter jejuni* 6764.
fecal coliforms, agar, recovery, water 8415.
fermenters, dissolved oxygen, mass spectroscopy 5873.
fungi 7632.
Fusarium, detection, zearalenone, zearalenol, T-2 toxin, deoxynivalenol, methodology 3748.
growth, *Bacillus thuringiensis* subsp. *gallicarum* 1613.
Helminthosporium solani, conidia production, silver scurf, *Solanum tuberosum* 8491.
hemagglutinin synthesis, *Bordetella pertussis* 9312.
hyperinfectivity, BACTEC test, detection, *Haemophilus influenzae* 698.
identification, plasmids curing, lactose fermentation, temperature effects on, *Streptococcus lactis* 7864.
inoculum, fungi, plant diseases field trials 5400.
instant potatoes, clinical microbiology, fungi 811.
Legionella pneumophila isolation methodology, guinea-pigs injection, water supplies contamination 4211.
liquid culture, agitation equipment, fermenters 5874.
liquid culture, glucose ammonium tartrate, degradation, sterilization, autoclaves 8490.
lysine production, *Brevibacterium* 6769.
manganese, nutrient requirements, patulin biosynthesis, *Penicillium urticae* 5796.
mange bacteria, biodegradation, putrescine, cadaverine, sea water 3676.
methodology, gram-negative bacteria, urine isolates, man 1588.
Mycobacterium isolation, Bactec test comparison 1581.
mycorrhizas, morphology, classification, isolation, growth, reviews 4628.
mycorrhizas detection, *Aspergillus*, *Penicillium* 5368.
Neisseria gonorrhoeae, methodology 7605.
Neisseria gonorrhoeae, penicillin resistance, β-lactamase production 718.
nutrient requirements, amino acids, vitamins, *Bacillus thuringiensis* subsp. *gallicarum* 7603.
nutrient requirements, *Brevibacterium* 5061.
nutrient requirements, *Leptospira* edodes 823.
peat hydrolysates, production, biomass, single-cell protein, *Agaricus campestris*, *Morchella esculenta* 8207.
phosphate, buffers, effects on, lactic acid bacteria, *Streptococcus*, antibiotic resistance 5708.
polyols, gels 6768.
polysorbate detoxification, *Leptospira* 9321.
production, *Bacillus thuringiensis* subsp. *israelensis*, powder 3562.
proteus, antibiotic sensitivity testing, methodology 433.
protoplast fusion, *Saccharomyces cerevisiae* × *Saccharomyces diastictus* 5925.
Pseudomonas aeruginosa, enhancement, pigments, production 7617.
reducing agents, *Azospirillum* 4175.
Rhizobium, nodulation, legumes, nitrogen fixation, reviews 4657.
Saccharomyces cerevisiae, oil cake extracts, Glycine max 8485.
semisynthesis, *Propionibacterium* acnes, production, polysaccharides, methodology 110.
Spiroplasma, nutrient requirements, methodology 1570.
sporulation, *Clostridium perfringens* 6757.
Stachybotrys chartarum, verrucarin J biosynthesis 7072.
Staphylococcus, clinical isolates, β-lactamase, production, screening, methodology 3740.
Staphylococcus identification methodology, novobiocin resistance 1318.
sulfite, *Candida* uteri 5935.
thermophilic microorganisms, use, GELRITE, gum 3335.
Trichoderma reesei + *Aspergillus wentii* mixed culture, association, production, cellulase, hemocellulase 1736.
Trichoderma reesei enzyme production 1803.
tropical environment soil, Rhizobium, interaction, Metarhizium 5634.
use, diagnosis, *Streptococcus agalactiae*, methodology 9325.
use, glycerophosphate, Tris, bacteria 7579.
use, identification, anaerobic bacteria, methodology 2519.
yolk, agar, enumeration, *Clostridium sporogenes*, spores, methodology 674.
yolk containing, *Mycoplasma pneumoniae* growth 1874.

Media (enrichment),
aerobic bacteria, cellulolytic enzymes activity 35.
Campylobacter fetus subsp. *jejuni* isolation, enumeration, poultry 2462.
Campylobacter jejuni, isolation, feces 7561.
Campylobacter jejuni, isolation, food 6958.
fecal coliforms, counting methods, chlorination, wastewater treatment effluents 1470.
isolation, *Campylobacter fetus* subsp. *jejuni* 2517.
isolation, feces, *Clostridium* 8469.
Legionella pneumophila, Acanthamoeba polyphaga, host-pathogen interactions, isolation methodology 2485.
liquids, *Campylobacter jejuni* isolation 5049.
media (isolation), Vibrio parahaemolyticus isolation, marine environment 7619.
membrane filtration, *Salmonella typhi*, indicator species, water 4935.
methodology, *Salmonella* isolation, sewage contamination water 9259.
microbial pollution, *Salmonella*, water pollution 4176.
microorganisms biomass production, slurries 7508.
Salmonella recovery, feeds, pyruvic acid effects on 3322.
screening, *Trichoderma reesei*, catabolite repression, resistant mutant, cellulase, production 1797.
thermophilic bacteria, *Campylobacter*, isolation, water 6754.

Media (isolation),
Actinomyces, methodology 775.
agar tubes, *Salmonella* 2503.
anaerobic bacteria, blood culture 2482.
beer spoilage bacteria 4192.
Campylobacter fetus 4201.
Campylobacter fetus subsp. *jejuni*, methodology 3305.
Campylobacter isolation, Larus feces 4205.
cell culture, 2-bromovinyl-2'-deoxyuridine sensitivity, herpes simplex virus 1, herpes simplex virus 2, clinical microbiology 607.
cephalexin containing, *Bordetella bronchiseptica* 7596.

Media (isolation), (continued)

Clostridium difficile, identification, toxins detection 229.
comparison, *Neisseria gonorrhoeae* clinical isolates recovery 1577.
comparison, *Ureaplasma urealyticum*, *Mycoplasma*, identification, isolation 658.
detection, *Lactobacillus brevis*, spoilage, beer 4414.
Frankia, actinomycetozoa 8471.
fresh water, Serratia 7536.
Haemophilus ducreyi, clinical isolates, methodology 711.
Haemophilus ducreyi, growth, methodology 6780.
Haemophilus equigenitalis, contagious equine metritis, methodology 3307.
Lactobacillus bulgaricus, *Streptococcus thermophilus*, yogurt 7006.
media (enrichment), Vibrio parahaemolyticus isolation, marine environment 7619.
membrane filtration, *Bacteroides fragilis*, indicator species, water 4936.
methodology, Legionnaire's disease diagnosis, man 4203.
milk agar, *Bacillus* spore germination, heat activation, enumeration 1911.
Moraxella bovis, keratoconjunctivitis, cattle 2452.
selectivity, *Neisseria gonorrhoeae* 5047.
Shigella, sodium+RNA containing 9326.
sodium azide, membrane filtration, indicator species, water, *Streptococcus bovis* 5054.
sodium taurocholate, *Clostridium difficile* spores, feces 688.
urogenital tract, *Ureaplasma urealyticum*, *Mycoplasma* 1865.
Vibrio isolation, quality control, statistical analysis 1622.
water pollution, *Salmonella* 5857.
yeasts 4225.
Yersinia enterocolitica recovery, environments 9327.
Yersinia ruckeri 9328.

Media (selective),
Actinobacillus actinomycetemcomitans 710.
bacteria quantification, cystic fibrosis, sputum 7588.
Bacteroides fragilis, isolation, identification 3355.
Bacteroides, use, vancomycin, antibacterial activity 3125.
Campylobacter fetus subsp. *jejuni* 2473.
Campylobacter jejuni isolation, feces isolates 5035.
Campylobacter, oxidase bacteria growth 1654.
Corynebacterium isolation 5031.
Cryptococcus neoformans var. *neoformans*, *Cryptococcus neoformans* var. *gatti* 80.
Escherichia coli, coliforms 9300.
fecal coliforms, coliforms, gelatin 1901.
Gaumannomyces graminis var. *tritici* 4218.
Haemophilus pleuropneumoniae 739.
Heterobasidium annosum assays, roots 2111.
isolation, *Campylobacter jejuni*, growth, frozen food 8704.
isolation, *Pasteurella multocida*, pigs 5912.
isolation, *Pseudomonas aeruginosa* 6783.
+latex agglutination, detection, identification, *Streptococcus* group B 1609.
Legionella pneumophila isolation, drinking water 785.
Legionella pneumophila, sputum, diagnosis, Legionnaire's disease 3336.
Listeria 3314.
methodology, gram-negative bacilli recovery, feces, man 3302.
methodology, Yersinia enterocolitica clinical isolates recovery 1594.
Pasteurella multocida 2507.
Pasteurella tularensis 3507.
Phytophthora cinnamomi, detection, Persea americana roots 5932.
Pseudomonas, fluorescence pigments production 7609.
Pseudomonas syringae var. *savastanoi*, methodology 7591.
Pythium isolation, soil, *Saccharum officinale* roots 1993.
Salmonella, isolation, methodology 7628.
spirochaetes, isolation, Ixodes dammini, Lyme disease association 2494.
Staphylococcus aureus 5071.
Streptococcus 773.
Streptococcus 3490.
Streptococcus group B, Granada medium 3320.
Trichoderma, Fusarium, soil isolation 797.
use, trimethoprim, isolation, *Campylobacter fetus* subsp. *jejuni* 1589.
Vibrio parahaemolyticus detection 777.
Xanthomonas campestris pv. *campestris*, isolation, Brassica seeds 4199.
Yersinia enterocolitica, feces 709.

Media (transport),
anaerobic bacteria, reviews 7610.
Campylobacter fetus subsp. *jejuni*, comparison, feces, man 3309.
Chlamydia psittaci, clinical isolates 4206.
isolation, pathogens, traveller's diarrhea, methodology 9309.
sodium borate, comparison, chloramine-T, *Mycobacterium bovis* 665.
swabs, isolation, *Chlamydia trachomatis*, diagnosis, sexually-transmitted diseases, man 5037.
urine preservatives, bacteriuria diagnosis 1608.
viruses, culture collections, methodology 2442.

Medicago,
disease resistance, varieties, plant breeding, scorch, *Kabatella caulivora* 6291.
nitrogen fixation, *Rhizobium meliloti*, acetylene reduction 4666.
nitrogen fixation, symbiosis mutants, genetic control, *Rhizobium meliloti* 5676.
pasture, root rot, phytopathogenic fungi 6233.
silage, fermentation, acid production, water content, time effects on 2745.

Medicago littoralis,
crop residues, soil amendment, decomposition, soil microorganisms 5685.

Medicago sativa,
agglutinins, nodulation, cell surface, *Rhizobium meliloti*, strains 5651.
callus culture, susceptibility, *Phytophthora megasperma* 4507.
cell lines, polyloidy, regeneration, disease resistance, toxins, *Fusarium oxysporum* f.sp. *medicaginis* 5494.
cell walls, solubilization, enzymes, *Ruminococcus albus* 5117.
Corynebacterium insidiosum wilt, disease resistance effects on phosphorus uptake 3879.
crop residues, smoke, antifungal activity, fungi 8319.
cucumber mosaic virus infection, etiology, disease transmission 2787.
cytogenetics, Verticillium albo-atrum wilt disease resistance 2884.
disease resistance, anthracnose, Colletotrichum trifolii 5499.
disease resistance, late spot, screening 8087.
fermentation, lactic acid bacteria effects on 3723.
Fusarium infection, epidemiology, British Isles 1971.
Glomus mosseae vesicular-arbuscular mycorrhizas, interaction, phosphate fertilizers 3946.
growth, phosphorus, nutrient uptake, nitrogen fixation, *Rhizobium meliloti*, inoculation effects on, vesicular-arbuscular mycorrhizas 8221.
growth, *Rhizobium meliloti* + vesicular-arbuscular mycorrhizas, effects on 6341.

diclo salvia, (continued)

- host-pathogen interactions, disease resistance, *Phytophthora megasperma* 8887.
 hydroxyproline content, cell walls, association, wilt, *Verticillium albo-atrum*,
Corynebacterium michiganense pv. *insidiosum* 7928.
 ices proteins, fermentation, lactic acid bacteria 3722.
 isoprot, *Staphylococcus aureus* 5435.
 isoprot, fixation, leghemoglobin, nodulation, biomass 2961.
 nitrogen fixation measurements, field trials, Sweden 9011.
 nitrogen fixation, nodulation, soil moisture effects on 2165.
 nitrogen fixation, *Rhizobium meliloti* symbiosis, calcium, magnesium effects on
 2960.
 nitrogen-fixing bacteria symbiosis, characterization 1279.
 nodulation, infectivity, role polysaccharides, extracellular polymers, *Rhizobium*
meliloti 6372.
 nodulation, *Rhizobium* inoculation 5663.
 plant breeding, disease resistance, *Phoma medicaginis* black stem 4572.
 plant breeding, inheritance, nodulation, *Rhizobium*, nitrogen fixation 2979.
Rhizobium meliloti, plasmids, role, nodulation, nitrogen fixation, gene mapping,
 reviews 4660.
Rhizobium nodules survival association calcium oxide pelleting 2950.
 roots, *Rhizobium meliloti* localization attraction 6380.
 sclerotinia, crown rot, stem rot, disease control, benomyl 5527.
 seedlings, fungi diseases, greenhouses, USA, California 1115.
 seeds germination, *Rhizobium meliloti* growth, *Verticillium wilt*, fungicides
 on 1211.
 selection, disease resistance, *Sclerotinia trifoliorum* plant diseases 5485.
 silage, proteolysis 1068.
 symbiosis, *Rhizobium meliloti* nitrogen fixation, glycine betaine effects on
 sodium chloride tolerance 2159.
 symbiosis, *Rhizobium meliloti*, *Rhizobium leguminosarum*, plasmid pLJ1008, effects
 on 4649.
 ultrastructure, disease resistance, host-pathogen interactions, *Phytophthora*
megasperma 8888.
Verticillium albo-atrum infection, pathogenesis, xylem 1118.
diclo truncatula,
 patch, *Rhizoctonia solani*, surveys, soils (calcareous) 255.
 roots colonization, inoculum potential, *Glomus* 8217.

- nitrogen fixation, nitrogen-15, acetylene reduction, hydrogen gas production,
 environmental chambers 2986.
dical dressings,
 polymers, surfaces hydrophobicity, cell adhesion, *Staphylococcus epidermidis*
 8428.
dical equipment,
 disinfection, disease control 1517.
 sterilization, ethylene oxide 1361.
 sterilization, ethylene oxide 8341.
dical instruments,
 sterilization, sterilization, bioassays, spores, *Bacillus subtilis*,
Bacillus stearothermophilus 7545.
 lubricants, effects on isolation, *Chlamydia trachomatis*, *Neisseria gonorrhoeae*,
 genital tract 697.
dical personnel,
 physical activity, effects on airborne microorganisms levels, operating theaters
 6720.

- dicarlin**,
 production, *Sophora japonica* leaves, *Helminthosporium carbonum* inoculation 1131.
dicline plants,
 extracts antibacterial activity, *Bacillus subtilis*, *Micrococcus luteus*,
Staphylococcus aureus 4012.
 flavanones antibacterial agents, isolation, new records 1328.
 plant extracts, antifungal activity, aflatoxins biosynthesis, *Aspergillus flavus*
 7897.
dicline,
 containers, pathogens contamination, nosocomial environments 1503.
dicline halteria,
 invasiveness, Basidiomycetes, pest control 8109.
 outbreaks, culture, *Agaricus brunneus* 6278.
dicline haemolysin,
 activity, *Staphylococcus aureus* 4012.
 growth, fermentation, chetamin, effects on 2315.
dicline leucandron,
 leaves, plant extracts, volatiles, antifungal activity, *Rhizoctonia solani* 9107.
dicline larici-populina,
 cell wall, antagonism, *Cladosporium*, hybrids, *Populus* 361.
dicline lin,
 host-pathogen interactions, peroxidase activity, lignin biosynthesis,
 incompatibility, *Linum usitatissimum* 8046.
 host-pathogen interactions, disease resistance, *Linum usitatissimum* 2107.
dicline medusae,
 infection, *Populus* disease resistance, light, temperature effects on 360.
 host-pathogen interactions, disease resistance, *Populus* 2107.
dicline peridomium betulinum,
 host-pathogen interactions, spore germination, temperature effects on, *Betula* 8950.
dicline,
 cellulose, effects on *Trichoderma longibrachiatum* cellulase 8530.
 pigments, biosynthesis, *Cryptococcus neoformans*, indole compounds utilization
 2845.
 production, *Microdochium bolleyi* 8626.
dicline gramminus negiflatus,
 seedfood, cold storage, isolation, gram-negative bacteria, psychophilic bacteria
 8703.
dicline,
 removal, enzymes, intracellular levels, *Coriaria* 3471.
dicline sanguinipes,
 entomopathogenic infection, use biological control 6905.
dicline,
 isolation, *Penicillium melegrinum*, X-ray crystallography 8375.
dicline,
 infection, *Trichoderma* bark, antibacterial activity, *Bacillus subtilis*, antifungal
 activity, *Cladosporium cucumerinum* 4738.

- Meiliotus officinalis**,
 sweet clover necrotic mosaic virus isolates, new records, characterization 4523.
Melinia minutiflora,
 mycorrhizas, factors affecting 8979.
Meloidogyne,
 cross-resistance, disease resistance, *Solanum sparsipilum*, wilt, *Pseudomonas*
solanacearum 8987.
 infection, + *Fusarium* wilt, disease resistance, plant breeding, *Lycopersicon*
esculentum 2864.
 pest control, soil properties, pesticide residues effects on, *Arthrobotrys*
irregularis 5216.
Meloidogyne arenaria,
 incidence, tobacco post-harvest decay, USA, South Carolina 3852.
Meloidogyne incognita,
 interspecific relationships *Fusarium oxysporum* f.sp. *vasinfectum*, wilt, soil
 nutrients uptake, *Gossypium barbadense* 283.
 mixed infection, + *Fusarium oxysporum* f.sp. *lycopersici*, pathogenesis, *Lycopersicon*
esculentum 8831.
 sodium azide, effects on, *Catenaria anguillulae*, biological control 8253.
 vesicular-arbuscular mycorrhizas fungi, mixed infection, phosphorus interaction,
Lycopersicon *esculentum* 371.
Meloidogyne javanica,
 biological control, *Bacillus penetrans* 1853.
 infection, *Cucurbita pepo*, watermelon mosaic virus effects on 6266.
Melon necrotic spot virus,
 infection, *Cucumis sativus*, disease control 6314.
Membrane filtration,
 adsorption, poliovirus 1 5013.
 chromatography, measuring techniques, phages, concentration, water, methodology
 5850.
 coliforms, drinking water, bacteria interference 2391.
 coliforms, indicator species, drinking water, microbial pollution 8421.
 coliforms recovery, most probable number, drinking water 6714.
 detection, fecal coliforms, water, recreation sites 8418.
 enzyme immunoassay, enumeration, *Staphylococcus aureus*, food, methodology 6968.
 Escherichia coli, separation techniques, homogenates, methodology 8473.
 isolation, actinomycetes, soil microorganisms 6316.
 media (enrichment), *Salmonella typhi*, indicator species, water 4935.
 media (isolation), *Bacteroides fragilis*, indicator species, water 4936.
 media (isolation), sodium azide, water, indicator species, *Streptococcus bovis*
 5054.
 protein A, infection diagnosis, herpes simplex virus, varicella-zoster virus
 5889.
 recovery, Escherichia coli 9285.
 recovery, Yersinia, drinking water survival 1494.
 staining, enumeration, bacteria 9329.
 sterility, air, gases, fermenters 8505.
 sterility testing, viruses, pharmaceuticals, veterinary medicine 7395.
 sterilization 1365.
Membrane fluidity,
 Clostridium acetobutylicum, butanol production effects on, lipid composition,
 Clostridium acetobutylicum, butanol production effects on 1847.
Membrane permeability,
 antibiotic resistance, β -lactam antibiotics, *Pseudomonas aeruginosa* 7349.
 antibiotic resistance, ampicillin, *Haemophilus influenzae* 7336.
 antibiotic resistance, moxalactam, *Serratia marcescens* 3038.
 Escherichia coli, mutants, gene mapping, relationship susceptibility,
 antibiotics, antibacterial activity 4794.
 membrane proteins, outer membranes, R factor R124 effects on, antibacterial
 agents sensitivity, Escherichia coli 4724.
 mutants, IMP excretion, *Brevibacterium ammoniagenes* 7765.
Pseudomonas aeruginosa, antibiotic resistance, β -lactam antibiotics 9081.
Membrane potential,
 fluorescence staining, rhodamine, bacteria live 5025.
 Phytophthora infestans infection effects on, cells, *Solanum tuberosum* 2014.
 protons, ATP stoichiometry, N.M.R., adenosinetriphosphatase, mutants, Escherichia
 coli 8531.
 protons pumps, fusicoxin effects on, roots, *Zea mays* 8739.
 Prunus persica, cell culture, association, *Xanthomonas campestris* pv. *pruni*,
 toxicity, detection, bioassays 9156.
Membrane proteins,
 aldehyde dehydrogenase purification, characterization, reconstitution,
 Acinetobacter calcoaceticus 4296.
 Chlamydia trachomatis, detection, immunoassays 753.
 influenza virus, rubella virus, liposomes incorporation, vaccines,
 immunogenicity, rabbits 6650.
 outer membranes, cell walls, purification, characterization, Legionella 2561.
 outer membranes, membrane permeability, R factor R124 effects on, antibacterial
 agents sensitivity, Escherichia coli 4724.
 outer membranes, ompA gene detection, Enterobacteriaceae, hybridization analysis
 1616.
 oxaloacetate decarboxylase subunits composition, characterization α -chains
 transferase activity, Klebsiella aerogenes 1791.
 purification, outer membranes, *Haemophilus influenzae* 3412.
Membrane vesicles,
 Methanobacterium thermoautotrophicum methanogenesis, cytoplasm cofactors 9035.
Membranes,
 association, bacteriocins, molecular weight, Bacteroides uniformis 5793.
 bioreactors, immobilized enzymes, β -D-galactosidase, Aspergillus niger 83.
 bioreactors, Saccharomyces cerevisiae, ethanol, fermentation 7804.
 filtration, industrial water systems, enzymes cleaning, microorganisms 57.
 poly(tetrafluoroethylene), use, *Rhizopus* exo-1,4- α -D-glucosidase
 immobilization 39.
 reactors, *Bacillus sphaericus* leucine dehydrogenase + *Candida boidinii* formate
 dehydrogenase, L-leucine production 3.
 Schizosaccharomyces pombe, lipid composition, sterol composition, drug resistance
 relationship 3890.
Staphylococcus aureus, lipids metabolism, lipoteichoic acid biosynthesis, role
 4266.
 synthetic, antibiotics purification methodology 3074.
 transport, DNA biosynthesis, clazamycin, inhibition 6559.
 ultrafiltration, immobilized cells, *Caldwellia acidophila*, enzymes thermal
 stability 764.

Membranes, (continued)

varicella-zoster virus, antigens, antibodies detection, enzyme immunoassay methodology 5880.

yeasts, 1,3- β -D-glucans hydrolysis, glycosylation 1883.

Memnoniella echinata

fruit rot, post-harvest decay 8876.

Meningitis

Wolonia succinogenes, spectrometry, N.M.R. 6894.

Meningococci

methylation derivatives, detection, new records, *Campylobacter fetus* 980.

Meningitis

animal models, *Escherichia coli*, *Listeria monocytogenes*, antibacterial activity, mezlocillin 4884.

bacteria, diagnosis, cerebrospinal fluid Phadebact test, man 3321.

false-positives, cerebrospinal fluid specimens, bacteria contamination incidence, man 4785.

Haemophilus influenzae, epidemiology, ampicillin, antibiotic resistance, man 7314.

Haemophilus influenzae type b, *Streptococcus pneumoniae*, diagnosis, counter immunoelectrophoresis, agglutination, Gram stain, comparison, man 3275.

immunodiagnosis, immunoassays, bacteria, man 9292.

Mycobacterium tuberculosis, cerebrospinal fluid immunoglobulin G measurement, enzyme-linked immunosorbent assay methodology, man 7590.

Mycobacterium tuberculosis, proteins, immunoglobulin G, detection, enzyme-linked immunosorbent assay, cerebrospinal fluid, man 6773.

Neisseria meningitidis, *Streptococcus pneumoniae*, *Haemophilus*, immunodiagnosis, counter immunoelectrophoresis, agglutination 2488.

Mentha piperita

stems, Verticillium dahliae distribution, disease resistance, relationship 7204.

3-Mercapto-1,2,4-benzothiadiazine-1,1-dioxide

esters, antimicrobial activity, synthesis 3070.

2-Mercaptoethanol

agglutination, immunodiagnosis, *Haemophilus pleuropneumoniae* infection, pigs 7593.

detection, antibodies, immunoglobulin M, tick-borne encephalitis virus, man 7557.

Mercenaria mercenaria

accumulation, elimination, *Salmonella typhimurium*, *Escherichia coli*, characterization 5314.

Mercuric chloride

salts, anions, susceptibility, *Mycobacterium avium*, *Mycobacterium intracellulare*, *Mycobacterium scrofulaceum* 3043.

Mercuric reductase

NADPH reaction, kinetics, mechanisms, plasmid pVS1, *Pseudomonas aeruginosa* 7162.

Thiobacillus ferrooxidans, isolation, characterization 6010.

Mercury

inorganic compounds, organic compounds, antimicrobial activity 1356.

pollution, bacteria biodegradation, resistance 3680.

resistance, bacteria, soil microorganisms, gene transfer, R factors 5717.

resistance, detoxification, bacteria, clinical isolates, reviews 9071.

resistance, effects on, biological properties, *Staphylococcus aureus* 440.

resistance, gram-negative bacilli 9042.

resistance, relationship β -lactamase levels, clinical isolates, *Staphylococcus aureus* 2203.

soil pollution, effects on soil microorganisms biodegradation glucose, calorimetry 2933.

Meristem tip culture

decontamination, potato virus X, potato virus S, cultivars, *Solanum tuberosum* 8881.

plant viruses, plant breeding, *Solanum tuberosum* 3858.

plant viruses, plant breeding, *Solanum tuberosum* 3859.

Mesitama

development, inhibition, *Pozzella ericae*, mycorrhizas, *Calluna vulgaris* 5560.

Mesophilic bacteria

digestion (anaerobic), animal wastes, cattle, wastewater treatment 7519.

digestion (anaerobic), animal wastes, methanogenesis 7517.

digestion (anaerobic), manure, pigs methane 7523.

methanogenesis, sodium acetate 3003.

Mesophyll

cells, *Vigna unguiculata*, infection, tobacco mosaic virus, tobacco necrosis virus, pathogenesis 6225.

Nicotiana tabacum, protoplasts, tobacco mosaic virus coat protein, mRNA characterization 286.

Metacycline

+amphotericin, antibiotic synergism, *Candida albicans* 7378.

Metaxyl

antifungal activity, *Phytophthora cinnamomi*, plant diseases, roots, *Persea americana* 8963.

antifungal activity, *Phytophthora infestans* 6313.

antifungal activity, *Phytophthora parasitica* var. *nicotianae* 8133.

antifungal activity, RNA biosynthesis, DNA biosynthesis, protein biosynthesis, *Phytophthora parasitica* var. *nicotianae* 8135.

\pm benomyl, \pm bromine, fumigation, comparison, drenches, disease control, *Phytophthora fragariae* infection, *Fragaria* 1182.

+captan, seed treatments, disease control, damping-off, downy mildew, *Brassica* 8141.

cross-resistance, fungicides, *Phytophthora infestans*, *Pseudoperonospora cubensis*, disease control, *Solanum tuberosum*, *Cucumis sativus* 2894.

disease control, *Phytophthora infestans*, late blight, *Lycopersicon esculentum* 106.

disease control, *Phytophthora infestans*, late blight, *Solanum tuberosum* 8926.

disease control, *Phytophthora megasperma*, root rot, *Brassica oleracea* 1225.

disease control, *Phytophthora parasitica* root rot, *Lycopersicon esculentum* 5532.

disease control, *Phytophthora*, root rot, silviculture, seedlings, *Pseudotsuga menziesii* 8927.

disease control, *Pythium aphanidermatum*, blight, *Agrostis* 8134.

disease control, *Pythium*, dieback, *Daucus carota* 6116.

disease control, soil-borne diseases, *Phaseolus vulgaris* 1210.

disease control, *Theobroma cacao*, pod rot, *Phytophthora palmivora* 5526.

ectomycorrhizas, *Abies fraseri* seedlings, effects on growth 1234.

effects on, blue mold, *Peronospora tabacina*, *Nicotiana tabacum* 8136.

foliar applications, disease control, downy mildew, *Peronosclerospora sorghi*, *Sorghum bicolor*, *Zea mays* 8126.

foliar applications, disease control, *Sclerospora graminicola*, downy mildew, *Pennisetum americanum* 8137.

Metaxyl, (continued)

injection, disease control, *Phytophthora cinnamomi*, root rot, *Persea americana* 8125.

\pm mancozeb, disease control, *Pythium ultimum*, decline, *Vitis vinifera* 8122.

sensitivity, *Plasmopara viticola* 3991.

resistance, *Pseudoperonospora cubensis* strains, competition, downy mildew, *Cucumis sativus* 341.

resistance, *Pseudoperonospora cubensis*, strains, pathogenicity, *Cucumis sativus* 4549.

seed treatments, disease control, downy mildew, *Peronosclerospora sorghi*, *Sorghum bicolor*, *Zea mays* 8144.

sensitivity, *Phytophthora* 5528.

sensitivity, *Phytophthora cinnamomi*, *Phytophthora citricola* 5533.

soil microorganisms interaction, survival, *Phytophthora cinnamomi* 2091.

Metalloproteinase

purification, characterization, *Aspergillus oryzae* 8578.

Vibrio cholerae, purification, characterization 34.

Metalloproteins

hydrogenase components, nickel, *Bradyrhizobium japonicum* 6826.

Metals

bioaccumulation, leaching, reviews, microorganisms 5692.

catechol dioxygenase, binding, substrates 5177.

centers, cytochrome c oxidase, E.S.R., reviews, *Saccharomyces cerevisiae* 5180.

fungi bioaccumulation, wood biodegradation 1030.

isolates on *Thermomonas fusca* cellulase activity 1804.

leaching, biotechnology, microorganisms 6393.

mining, industrial effluents, microbial pollution 415.

oxidesinhibition *Rhizobium leguminosarum* var. *trifolii* nodulation, *Trifolium* 7294.

tolerance, bacteria, antibiotic resistance, drinking water isolates 6433.

toxicity, effects on soil microorganisms biomass 8255.

uptake, soil microorganisms, conferences, books 2543.

Metam

+sodium, use, irrigation, disease control, *Verticillium dahliae* infection, *Solanum tuberosum*, effects on yield 1209.

Metarhizium

interaction *Rhizobium*, media (culture), tropical environment, soil 5634.

Metarhizium anisopliae

biological control, ovids, eggs susceptibility, *Perileucoptera coffeella* 6910.

biological control, soil colonization, disease reservoirs, *Curculio caryae* 5263.

biological control, temperature effects on susceptibility, *Otiorynchus sulcatus* 2650.

inoculum production, factors affecting, biological control, *Carpodacus* 5266.

isolates, pathogenicity, biological control, *Diatraea saccharalis* 6908.

pathogenicity, biological control, larvae, *Aedes aegypti* 8630.

strains identification, gas chromatography, pyrolysis products 4227.

Metarhizium flavoviride

biological control, temperature effects on susceptibility, *Otiorynchus sulcatus* 2650.

Metazoa

incidence, industrial effluents, brewer's 3208.

Metecology

epidemiology, plant diseases 1095.

monitoring, plant diseases, epidemiology 1110.

Metam

fumigation, effects on soil microorganisms, crop fields 5681.

Methane

biodegradation, fungi, bacteria, oxidation, reviews 7823.

biosynthesis, energy resources, digestion (anaerobic), reviews 8271.

composition, hydrogen sulfide corrosion, methanogenesis, digestion (anaerobic) 5701.

electrodes, *Methylobacterium flagellata*, immobilized cells 767.

inhibition, methanogenesis, immobilized cells 7304.

measuring techniques, equipment, digestion (anaerobic) 7503.

metabolism, production, single-cell protein, amino acids, fuels, methylotrophic bacteria 5706.

oxidation, coal, immobilized cells, *Methylobacterium rubra* 1300.

oxidation, *Methylobacterium trichosporum*, 2-chloro-6-(trichloromethyl)pyridine, effects on 2999.

production, bacteria, animal wastes fermentation, kinetics, mathematical models 9033.

production, *Cocos nucifera*, agricultural wastes+cattle animal wastes 1487.

production, crop residues fermentation, reviews, microorganisms 5703.

production, digestion (anaerobic), bioreactors 3557.

production, digestion (anaerobic), cheese whey, reactors 3197.

production, digestion (anaerobic), methanogenic bacteria 4116.

production, fermentation kinetics, digestion (anaerobic), bioreactors 4404.

production, fermenters, digestion (anaerobic) 420.

production, manure, pigs, digestion (anaerobic), thermophilic bacteria, mesophilic bacteria 7523.

production, wastewater treatment, *Clostridium butyricum*, immobilized cells 1468.

production, wastewater treatment, digestion (anaerobic), bioreactors 4110.

quality, methanogenesis, digestion (anaerobic), bioreactors design 5700.

recovery, landfills 9240.

use, reactors design, digestion (anaerobic), animal wastes, methanogenesis 569.

Methane monooxygenase

alkylation activity, *Methylosinus trichosporum* 8547.

Methylococcus capsulatus, *Methylosinus trichosporum*, intracellular, localization, nutrient requirements, copper extracellular levels 3007.

Methanobacterium

measurements, enzyme-linked immunosorbent assay methodology 9316.

methanogenesis 3584.

Methanobacterium formicicum, mixed culture, bacteria, methanogenesis, immobilized cells, sucrose conversion 2182.

Methanobacterium thermoautotrophicum, coenzyme F420, assays, association, photobleaching, fluorescence decay 6819.

factor F430, N.M.R., structure 6071.

formaldehyde oxidation, methanogenesis 4681.

hydrogenase, nickel characterization 8561.

hydrogenase, nickel, iron, characterization 8560.

methanofuran structure 8636.

methanogenesis, coenzymes, 5,10-methylene-5,6,7,8-tetrahydromethanopterin 42.

methanogenesis, membrane vesicles, cytoplasm cofactors 9035.

methanogenesis pathways, acetic acid biosynthesis relationship 1295.

Methanospirillum hutchinsonii, N.M.R., new records 979.

7-methylpterin analysis 1703.

Methanobacterium thermoautotrophicum, (continued)

- nickel tetraphenyl cofactor F430 multiple forms, U.V. spectroscopy, mass spectroscopy 4291.
- tetraphenylroles biosynthesis, reviews 4380.
- Methanococcus halophilus*,
cyanocobalamin biosynthesis 963.
- tetraphenylroles biosynthesis 6095.
- Methanococcus jannaschii*,
formaldehyde oxidation, methanogenesis 4681.
- Methanococcus vannielii*,
ribosomes, aminoglycoside antibiotics sensitivity 2237.
- Methanococcus voltae*,
formaldehyde oxidation, methanogenesis 4681.
- Methanofuran**,
structure, *Methanobacterium thermoautotrophicum* 8636.
- Methanogenesis**,
acetic acid conversion, kinetics, bioreactors 3979.
- acetic acid digestion (anaerobic), inhibition, 2-bromoethanesulfonate 7524.
- acetic acid fermentation, kinetics, methanogenic bacteria 3002.
- acid production, anaerobic conditions, wastewater treatment, industrial effluents 9227.
- acid production, straw, lignocelluloses, sodium hydroxide hydrolysis 9032.
- activated sludge, sedimentation, methanogenic bacteria 3203.
- anaerobic bacteria, mass energy balance 4679.
- anaerobic conditions, composting, sewage sludge 4102.
- anaerobic conditions, films, bioreactors, wastewater treatment, thermophilic bacteria 4926.
- anaerobic conditions, wastewater treatment, animal wastes, pigs 9037.
- analysis, monitoring, digestion (anaerobic) 5698.
- anaerobic waste conversion, digestion (anaerobic) 5275.
- animal wastes, immobilized cells, methanogenic bacteria 4124.
- animal wastes, waste treatment 2339.
- bacteria, immobilized cells, waste water, reactors 419.
- bacteria inhibition, digestion (anaerobic), methanogenic bacteria 9036.
- bacteria mixed culture, sucrose conversion, immobilized cells 1182.
- biomass, digestion (anaerobic) 5820.
- biotechnology, China, People's Rep. 6167.
- cellulose degradation, *Acetivibrio cellulolyticus* + *Desulfovibrio* + *Methanosarcina barkeri* mixed culture 2186.
- chickens manure slurries 7306.
- digestion (anaerobic), animal wastes, cattle 7504.
- digestion (anaerobic), animal wastes, methanophilic bacteria 7517.
- digestion (anaerobic), animal wastes, pigs 7514.
- digestion (anaerobic), animal wastes, reactors design, methane use 5699.
- digestion (anaerobic), biomass, nitrogen sources effects on, *Ulva*, *Gracilaria tikvahiae* 6396.
- digestion (anaerobic), bioreactors design, methane quality 5700.
- digestion (anaerobic), bioreactors effluents, wastewater treatment 5827.
- digestion (anaerobic), bioreactors, peat hydrolysis, aerobic bacteria 7303.
- digestion (anaerobic), books 5940.
- digestion (anaerobic), food processing, industrial wastes, use food drying, + solar radiation 7489.
- digestion (anaerobic), food processing wastes, *Beta vulgaris* 6681.
- digestion (anaerobic), hydrolysis, biomass, *Spirulina maxima* 1292.
- digestion (anaerobic), industrial effluents, molasses fermentation 8401.
- digestion (anaerobic), industrial wastes, use, aquaculture, *Basidiomycetes* culture 8404.
- digestion (anaerobic), inhibition, antibiotics residues, feces 8396.
- digestion (anaerobic), lignocelluloses, crop residues 5696.
- digestion (anaerobic), methane composition, hydrogen sulfide, corrosion 5701.
- digestion (anaerobic), methanogenic bacteria 5821.
- digestion (anaerobic), methanogenic bacteria 9233.
- digestion (anaerobic), *Oryza sativa* straw, effects on digestibility, cattle 7875.
- digestion (anaerobic), peat, reviews 8273.
- digestion (anaerobic), reactors design, surveys, Europe, books 7639.
- digestion (anaerobic), sewage sludge + *Spirulina maxima* biomass 1293.
- digestion (anaerobic), slurries 8395.
- digestion (anaerobic), sodium chloride, ammonium chloride, inhibition 6693.
- digestion (anaerobic), waste treatment, industrial wastes 547.
- digestion (anaerobic), waste treatment, monitoring, mass spectroscopy 1458.
- digestion (anaerobic), wastewater treatment 5825.
- digestion (anaerobic), wastewater treatment, industrial effluents, food industry 8405.
- digestion (anaerobic), wastewater treatment, kinetics, mathematical models 4900.
- digestion (anaerobic), ultrastructure, anaerobic conditions reactors 6397.
- food processing wastes, bioreactors, *Coffea arabica* 7515.
- formaldehyde oxidation, methanogenic bacteria 4681.
- gas production, measuring techniques 3983.
- glucose fermentation, Michaelis-Menten parameters, methanogenic bacteria 8266.
- hydrogen metabolism, carbon monoxide, carbon sources, *Methanosarcina barkeri* 3982.
- hydrogenase, characterization, iron, nickel, *Methanobacterium thermoautotrophicum* 8560.
- immobilized cells, digestion (anaerobic), waste treatment, manure, chickens 7518.
- immobilized cells, supports, inhibition, hydrogen, ethane, methane 7304.
- industrial effluents digestion (anaerobic), distilleries 2185.
- inhibition, phenol, aromatic compounds, digestion (anaerobic), wastewater treatment 4680.
- manure, digestion (anaerobic), reactors design 5824.
- mathematical models, digestion (anaerobic), animal wastes, chickens 8394.
- mathematical models, monitoring, digestion (anaerobic) 5702.
- metabolism, reviews, methanogenic bacteria 8267.
- Methanobacterium thermoautotrophicum*, coenzymes, 5,10-methenyl-5,6,7,8-tetrahydromethopterin 4282.
- methanogenic bacteria digestion (anaerobic), algae biomass 2183.
- methanogenic bacteria, nitrogen recycling, bioreactors, biomass, *Gracilaria tikvahiae* 8272.
- methanogenic bacteria, pathways, acetic acid biosynthesis relationship 1295.
- methanopterin derivatives, *Methanosarcina barkeri* 4678.
- Methanosarcina*, *Methanotherox*, digestion (anaerobic), temperature, effects on 3980.
- Methanotherox*, digestion (anaerobic), characterization 3981.
- mixed culture fermenters, propionic acid biodegradation 6398.
- mixed culture, methanogenic bacteria, hydrogen bacteria, acetic acid conversion 3984.
- peat, temperature effects on 8264.

Methanogenesis, (continued)

- physicochemical properties, digestion (anaerobic) 5822.
- redox properties 5695.
- reviews 4400.
- sludge, digestion (anaerobic) 5844.
- sodium acetate, mesophilic bacteria 3003.
- USA, biotechnology 6395.
- use, *Chlorophyta* substrates, methanogenesis bacteria 2184.
- use *Oryza sativa* residues, lignocelluloses biodegradation, culture, *Pleurotus sajor-caju* 2697.
- volatiles fatty acids, digestion (anaerobic), food processing, industrial wastes 5704.
- waste treatment, starter cultures, manure 2340.
- wastes, digestion (anaerobic) 5831.
- wastewater treatment, industrial effluents, food processing, com, bioreactors 7510.
- yield assays, biomass, digestion (anaerobic) 5697.
- Methanogenic Bacteria**,
acetic acid digestion (anaerobic), methanogenesis, inhibition, 2-bromoethanesulfonate 7524.
- biodegradation, cresote, contamination, aquifers 5815.
- biodegradation, dechlorination, 2,4,5-T 6160.
- bioreactors, digestion (anaerobic), fermentation kinetics 4404.
- bioreactors, matrix, surface properties 421.
- biotyping, fermenters 7305.
- Chlorophyta* substrates, methanogenesis production 2184.
- coenzyme M biosynthesis, formic acid metabolism 6825.
- cyanocobalamin biosynthesis 963.
- digestion (anaerobic), algae biomass, methanogenesis production 2183.
- digestion (anaerobic), industrial effluents toxicity 1483.
- digestion (anaerobic), methane production 4116.
- digestion (anaerobic), methanogenesis, food processing wastes, *Coffea arabica* 7515.
- digestion (anaerobic), methanogenesis, spectroscopy, bioassays 8269.
- digestion (anaerobic), waste treatment, fluorescence, monitoring 4104.
- energy sources, digestion (anaerobic), biotechnology, USA 6395.
- formaldehyde oxidation, methanogenesis 4681.
- genetic engineering, use, waste treatment 4127.
- glucose fermentation, methanogenesis, Michaelis-Menten parameters 8266.
- hydrogen bacteria, mixed culture, acetic acid conversion, methanogenesis 3964.
- hydrogen, carbon dioxide, uptake, measuring techniques 3263.
- immobilized cells, methanogenesis, animal wastes 4124.
- incidence, animal wastes, sewage sludge 4134.
- measurements, enzyme-linked immunosorbent assay methodology 9316.
- metabolism, methanogenesis, reviews 8267.
- methane biosynthesis, energy resources, digestion (anaerobic), reviews 8271.
- methanogenesis, acetic acid conversion, kinetics, bioreactors 3979.
- methanogenesis, acetic acid fermentation, kinetics 3002.
- methanogenesis, acid production, straw, lignocelluloses, sodium hydroxide hydrolysis 9032.
- methanogenesis, activated sludge, sedimentation 3203.
- methanogenesis, anaerobic conditions, wastewater treatment, animal wastes, pigs 9037.
- methanogenesis, animal wastes, waste treatment 2339.
- methanogenesis, biotechnology, China, People's Rep. 6167.
- methanogenesis, chickens manure slurries 7306.
- methanogenesis, digestion (anaerobic) 5821.
- methanogenesis, digestion (anaerobic) 9233.
- methanogenesis, digestion (anaerobic), biomass, nitrogen sources effects on, *Ulva*, *Gracilaria tikvahiae* 6396.
- methanogenesis, digestion (anaerobic), bioreactors, peat hydrolysis, aerobic bacteria 7303.
- methanogenesis, digestion (anaerobic), food processing, industrial wastes, use food drying, + solar radiation 7489.
- methanogenesis, digestion (anaerobic), inhibition, bacteria 9036.
- methanogenesis, gas production, measuring techniques 3983.
- methanogenesis, immobilized cells, supports, inhibition, hydrogen, ethane, methane 7304.
- methanogenesis, inhibition, phenol, aromatic compounds, digestion (anaerobic), wastewater treatment 4680.
- methanogenesis, nitrogen recycling, bioreactors, biomass, *Gracilaria tikvahiae* 8272.
- methanogenesis pathways, acetic acid biosynthesis relationship 1295.
- methanogenesis, peat, temperature effects on 8264.
- methanogenesis, reviews 4400.
- methanogenesis, sodium chloride, ammonium chloride, inhibition, digestion (anaerobic) 6693.
- mixed culture, bacteria, methanogenesis, sucrose conversion, immobilized cells 2182.
- starter cultures, manure, waste treatment, methanogenesis 2340.
- tetraphenylroles biosynthesis 6095.
- toxicity, chloroform, cyanide, industrial effluents, digestion (anaerobic) 2376.
- toxicity, pulp mills, industrial effluents, biodegradation, digestion (anaerobic) 6669.
- Methanol**,
addition, computer applications, monitoring, dissolved oxygen, batch culture, fermentation, *Pseudomonas* 8633.
- bacteria biodegradation, oxidation, reviews 7823.
- biodegradation, metabolism, activated sludge 6706.
- biodegradation, metabolites production, biotechnology, reviews, methylotrophic bacteria 5228.
- carbon sources, Hyphomicrobium growth, waste water denitrification 1492.
- carbon sources, single-cell protein production, microorganisms 1922.
- comparison, heat, fixation, Gram stain, methodology 5076.
- conversion, methanogenesis, immobilized cells, supports 7304.
- conversion, organic acids production, *Butyrivibrio methylotrophicum* 3418.
- extracts, inhibition, *Abies balsamea* soil nitrification, proteins binding effects on, sub-appeal environments 2909.
- fermentation, batch culture, *Methylomonas methanovorans* 121.
- fermentation, single-cell protein production, monitoring, computer applications, *Hanselula polymorpha* 5966.
- metabolism, fuels production, anaerobic bacteria 5312.
- oxidation enzymes, biosynthesis, *Hanselula polymorpha* 929.
- oxidation, formate dehydrogenase, purification, characterization, *Pichia pastoris* 2614.
- oxidation, kinetics, *Hanselula polymorpha*, immobilized cells 997.

Methanol, (continued)

production, fermenters, carbon dioxide utilization 3558.
solubilization, *n*-alkanes, metabolism, *Candida lipolytica* 1307.
substrates, *Pichia pinus* growth 1043.
use, extraction lipids, *Acholeplasma laidlawii*, association, freezing 9314.
utilization, bacteria, L-serine biosynthesis enhancement, L-serine analogues resistant mutant 1705.
utilization, homocysteine methylation, L-methionine production, *Pseudomonas*, methylotrophic bacteria 4264.
utilization, single-cell protein production, harvesting, methylotrophic bacteria, thermophilic bacteria 8515.

Methanolysis

isolation, cytochrome, structure 1433.

Methanophages

Methanobacterium thermoautotrophicum, N.M.R., new records 979.

Methanopterin

derivatives, *Methanosarcina barkeri*, methanogenesis 4678.

Methanosarcina

methanogenesis, digestion (anaerobic), temperature, effects on 3980.
methanogenesis films, ultrastructure, anaerobic conditions reactors 6397.
methanogenesis, sodium chloride, ammonium chloride, inhibition, digestion (anaerobic) 6693.

Methanosarcina barkeri

+Acetivibrio cellulolyticus +Desulfotribium mixed culture, cellulose degradation, methanogenesis 2186.
carbon monoxide dehydrogenase, purification, characterization 3521.
cyanocobalamin biosynthesis 963.
digestion (anaerobic), wastewater treatment 4123.
hydrogen metabolism, methanogenesis, carbon monoxide, carbon sources 3982.
5-hydroxy-benzimidazoylcarbamide derivatives, biosynthesis, isolation 3553.
methanogenesis, acetic acid conversion 3984.
methanogenesis pathways, acetic acid biosynthesis relationship 1295.
methanogenesis, sodium acetate 3003.
methanopterin derivatives, methanogenesis 4678.
mixed culture, bacteria, methanogenesis, immobilized cells, sucrose conversion 2182.
pyrrololes biosynthesis 6095.

Methanosarcina vacuolata

cyanocobalamin biosynthesis 963.

trappyrroles biosynthesis 6095.

Methanosarcina barkeri

measurements, enzyme-linked immunosorbent assay methodology 9316.

Methanotrix

methanogenesis, digestion (anaerobic), characterization 3981.
methanogenesis, digestion (anaerobic), temperature, effects on 3980.
methanogenesis films, ultrastructure, anaerobic conditions reactors 6397.
Methanotrix soehngeni,
methanogenesis 3984.

Methanamine

treatment, urinary tract infection, bacteria, man 2212.

5,10-Methylen-5,6,7,8-tetrahydromethanopterin

coenzymes, methanogenesis, *Methanobacterium thermoautotrophicum* 4282.

Methicillin

antibacterial activity, *Staphylococcus aureus*, ATP bioassays, alkanal monooxygenase (FMN-linked) 4069.
antibiotic resistance, micromethods, dilution tests, *Staphylococcus*, use sodium chloride containing Mueller-Hinton agar 3012.
antibiotic resistance, *Staphylococcus aureus* 4708.
antibiotic resistance, *Staphylococcus aureus*, disc-diffusion test, detection 7346.
antibiotic resistance *Staphylococcus aureus*, in vitro, β -lactam antibiotics, antibacterial activity 7343.
antibiotic resistance, *Staphylococcus aureus*, quality control, clinical microbiology 4688.
antibiotic resistance, *Staphylococcus*, detection, use, AutoMicrob test 2207.
antibiotic sensitivity testing, *Staphylococcus*, clinical isolates, Italy 7441.
cross-resistance, cephalosporins, *Staphylococcus aureus* 6412.
resistance, *Staphylococcus aureus* 6438.
resistance, *Staphylococcus aureus*, antibacterial activity, pseudomonic acid 4727.
resistance, *Staphylococcus aureus*, diffusion tests 4712.
sensitivity, *Staphylococcus aureus*, antibacterial activity, penicillins 4842.
Staphylococcus aureus resistance, AutoMicrob test 4714.

Methionine

levels, fermentation, temperature effects on, cornmeal, lactic acid bacteria 7881.
over production, ethylmethanesulfonate mutagenesis, single-cell protein, yeasts 5115.

L-Methionine

production, methanol utilization, homocysteine methylation, *Pseudomonas*, methylotrophic bacteria 4264.

L-Methionine γ -lyase

mechanisms, synthesis sulfur, selenium containing amino acids, *Pseudomonas putida* 65.

Pseudomonas putida, use, amino acids isotopes radioactive labelling 4311.
purification, characterization, *Pseudomonas putida* 177.
purification, characterization, *Pseudomonas putida* 6846.

Methionine adenosyltransferase

purification, characterization, reviews, *Escherichia coli*, *Saccharomyces cerevisiae* 8569.

Methionine sulfoxide

inhibition, dimethyl sulfoxide reductase, *Saccharomyces cerevisiae*, wort 6941.
Methionyl-tRNA synthetase,
Escherichia coli, homology, tyrosyl-tRNA synthetase, *Bacillus stearothermophilus* 2621.

Methotrexate

measuring techniques, bioassays, use *Lactobacillus casei* 2472.
tetrahydrofolate dehydrogenase inhibition, kinetics, *Neisseria gonorrhoeae* 8579.

7 α -Methoxy cephalosporins

comparison, 7 β -methoxyminoacetamide cephalosporins, antibacterial activity, *Bacteroides fragilis* 3096.

3-Methoxy octadecanoic acid

fatty acid composition, glycolipids, *Rhodotorula glutinis* 4382.

6-Methoxy tetracycline

Teclea trichocarpa bark, antibacterial activity, *Bacillus subtilis*, antifungal activity, *Cladosporium cucumerinum* 4738.

2-Methoxy-1,4-benzoquinone

biosynthesis, vanillic acid metabolism, laccase activity, fungi 8644.

3-Methoxy-4-methyl-5-(3-methyl-2-butenyl-oxy)-1,2-benzenedimethanol,
production, phytotoxins, Alternaria 7903.

2-Methoxyacetyl amino-benzenesulphonyl amino acid

antimicrobial activity, synthesis 3071.

4-Methoxyacetyl amino-benzenesulphonyl amino acid

antimicrobial activity, synthesis 3071.

4-Methoxybenzoate monooxygenase (O-demethylating)

putidammonoxin active sites, Mossbauer spectroscopy, *Pseudomonas putida* 5178.

2-(Methoxycarbonyl)-methylene-3-oxo-4-carboxylic acids

derivatives, synthesis, antibacterial activity 9187.

3-Methoxycarbonyl-7-formyl-1-benzoxapin-5(2H)-one

Maramisium ramealis, isolation, synthesis 5253.

Methoxychlor

effects on soil microorganisms, biodegradation 9024.

2-Methoxyethanol

fuels, spoilage, *Pseudomonas putida* growth 3005.

7 β -Methoxyminoacetamide cephalosporins,
comparison, 7 α -methoxy cephalosporins, antibacterial activity, *Bacteroides fragilis* 3096.

m-Methoxyphenylacetic acid

Rhizoctonia solani, effects on Glycine max, nodulation, histopathology 1119.

Methyl α -glucoside

chromatographic production, effects on, *Streptomyces venezuelae* 4053.

 α -Methyl β -hydroxy esters

biosynthesis, benzyl 2-methyl-3-oxobutyric acid reduction, yeasts 3560.

Methyl bromide

fumigation, +solar radiation, soil, effects on crater disease, *Triticum aestivum* 8120.
toxicity, phytopathogenic fungi, soil microorganisms 1218.

Methyl isocyanide

inhibition nitrogenase, *Azotobacter vinelandii* 1816.

6-O-Methyl thymycin A

synthesis, antibacterial activity 5782.

Methyl 2-methyl-3-(2-thienyl)-3-oxopropionate

reduction, stereoselectivity, yeasts 6098.

Methyl 2-methylalates

biosynthesis, dimethyl 2-methyl-3-oxosuccinic acid reduction, *Saccharomyces cerevisiae*, *Candida albicans* 3561.

Methyl 3-phenyl-2-oxobutyrate

reduction, α -methyl β -hydroxy esters production, stereoselectivity, yeasts 6097.

Methyl 3-(2-furyl)-2-methyl-3-oxopropionate

reduction, methyl 3-(2-furyl)-3-hydroxy-2-methyl propionates production, stereoselectivity, yeasts 6096.

Methyl 3-(2-furyl)-3-hydroxy-2-methyl propionates

production, methyl 3-(2-furyl)-2-methyl-3-oxopropionate reduction, stereoselectivity, yeasts 6096.

Methyl β -D-glucoside

role, β -D-glucosidase enhancement, *Streptomyces griseoflavus* 4345.

Methyl- α -hydroxymalacetate

lipex pachydion, effects on protons pumps, respiration (cyanide insensitive), roots, *Triticum aestivum* 8745.

3-Methyl-n-alkylthiomethyl-pyridinium chloride

antifungal activity, antibacterial activity 9132.

Methyl-perhydroindanone

biosynthesis, androst-4-ene dione conversion, immobilized cells, *Nocardia* 105.

6-Methyl-pyrid-2-yl-amine palladium-dichloride

inhibition, β -lactamase, *Bacillus cereus* 1754.

9-Methyl-10-hydroxydaunomycin

biosynthesis, *Saccharomyces cerevisiae*, auramycinone conversion 955.

2-Methyl-2-aryloxyacetic acids

reduction, *Glomerella cingulata* 8681.

Methyl-2-chloropropionic acid

hydrolysis, Triacylglycerol lipase, stereoselectivity, esters production, *Candida lipolytica* 7769.

2-Methyl-2-cyclohexan-1-one

reduction, *Clostridium* growth 1881.

Methyl-2-methyl-3-(2-furyl)-3-hydroxypropionate

production, methyl-2-methyl-3-(2-furyl)-3-oxopropionate reduction, yeasts 4399.

Methyl-2-methyl-3-(2-furyl)-3-oxopropionate

reduction, methyl-2-methyl-3-(2-furyl)-3-hydroxypropionate production, yeasts 4399.

1-Methyl-3-n-alkylthiomethyl-imidazole chloride

antifungal activity, antibacterial activity 9132.

2-Methyl-3-(5,6-dihydrothiazolo[3,2-b]-s-triazol-2-ylmethyl)indole

synthesis, antifungal activity 6469.

Methylamine

Azotobacter vinelandii uptake measurement, filtration methodology 4195.

+calcium hydroxide, use, decontamination methodology, aflatoxins food contamination peanuts meets 7097.

Methylation

menaquinone-6 derivatives, detection, new records, *Campylobacter fetus* 980.

Methylcellulose

media, use, plaque assay, murine leukemia virus 2444.

Methylene blue

pseudorabies virus photoinactivation 468.

staining, bacteria, blood culture 703.

Methylene chloride

Pseudomonas, metabolism, biodegradation 3661.

(2,3)- β -Methylenepepnam

derivatives, antibacterial activity, structure-activity relationship, inhibition, β -lactamase 6532.

Methylhydrazine

derivatives, antibacterial activity, antitumor activity 2219.

3-(2-Methylindol-3-ylmethyl)-s-triazolo[3,4-b][1,3,4]thiadiazole

synthesis, antifungal activity 6469.

Methylmalonyl-CoA decarboxylase

isolation, *Nocardia mediterranei*, characterization 8607.

Methylmalonyl-CoA mutase

role, erythromycin, biosynthesis, purification, characterization 2617.

N-Methylmorphine

production, association, nicotine biodegradation, fungi 1890.

- Methylnaphthalene**, hydroxylation, *Cunninghamella elegans* 2187.
- Methylnaphthalene**, hydroxylation, *Cunninghamella elegans* 2187.
- Methylococcus capsulatus***, methane monooxygenase, intracellular localization, nutrient requirements, copper extracellular levels 3007.
- Methylomonas***, single-cell protein production optimization, cost-benefit analysis, fermentation, mathematical models 5963.
- Methylomonas flagellata***, immobilized cells, electrodes, methane 767.
- Methylomonas methanoloovorans***, batch culture, methanol fermentation 121.
- Methylorubrum rubrum***, single-cell protein, purification 8524.
- Methylobacterium trichosporium***, methane monooxygenase, dealkylation activity 8547.
- Methylobacterium***, methane monooxygenase, intracellular localization, nutrient requirements, copper extracellular levels 3007.
- Methylobacterium***, methane, oxidation, 2-chloro-6-(trichloromethyl)pyridine, effects on 2999.
- Methylobacterium***, methanotrophic bacteria, purification, characterization 3514.
- Methylobacterium***, catalysts, hydrocarbons oxidation 425.
- Methylobacterium***, copper nutrient requirements, growth 8476.
- Methylobacterium***, fermentation, methanol monitoring, dissolved oxygen, computer applications, batch culture 8633.
- Methylobacterium***, genetic engineering 5205.
- Methylobacterium***, metabolism, hydrocarbons, production, single-cell protein, amino acids, fuels 6706.
- Methylobacterium***, methanol biodegradation, metabolites production, biotechnology, reviews 5228.
- Methylobacterium***, methanol utilization, homocysteine methylation, L-methionine production 4264.
- Methylobacterium***, plasmids stability, regulation, feedback inhibition, chemostats 9303.
- Methylobacterium***, pyroloquinoline quinone production 4347.
- Methylobacterium***, thermophilic bacteria, methanol utilization, single-cell protein production, harvesting 8515.
- Methylotrichum***, *Methanobacterium thermoautotrophicum*, analysis 1703.
- Methylpyrazole carboxanilides***, structure-activity relationships, antifungal activity, *Rhizoctonia solani*, bacteria, cancer, root rot, *Gossypium hirsutum* 5531.
- Methylquinolines***, antifungal activity, pathogens, fungi 5740.
- Methylsterigmatocystin***, biosynthesis, *Aspergillus parasiticus* cell free system, sterigmatocystin conversion 2760.
- Methylstyrene***, bacteria, biodegradation 2700.
- Methylthiazole-5-acetic acid***, isolation, identification, *Phycomyces blakesleeana* 7771.
- (N-Methylthiocarbamoyl)-D,L-cysteine***, inactivation amino-acid racemase, kinetics.
- (S-N-methylthiocarbamoyl)-D,L-cysteine*** 5151.
- Methylthioethanol***, side chains, cephalosporins, stability 6343.
- Methylumbelliferol-p-D-glucuronide***, *lumen*, *Escherichia coli* isolation, identification 5050.
- etiopirum***, antibacterial activity, *Shigella flexneri*, *Shigella sonnei* 1333.
- etopophorum dirhodum***, biological control, pathogenicity, field trials, *Entomophthoraceae* 5230.
- etopophorum***, biological control, pathogens, field trials, *Erynia neopaphidis* 5229.
- etruzin***, foliar applications, effects on *Solanum tuberosum* yield, association, infection, potato virus X, potato virus Y, potato leaf roll virus 8019.
- etruzin***, resistance, Hm gene, linkage, Rps1 gene, disease resistance, *Phytophthora megasperma* f.sp. *glycine*, *Glycine* max 2064.
- etronidazole***, agar diffusion test, bioassays, *Clostridium perfringens* 7365.
- etronidazole***, antibacterial activity, anaerobic bacteria, treatment, infection 453.
- etronidazole***, antibacterial activity, clinical trials, pharmacokinetics, pediatrics, reviews 5732.
- etronidazole***, antibacterial activity, *Escherichia coli*, DNA damage 6449.
- etronidazole***, antibiotic resistance, clinical isolates, *Bacteroides fragilis* 8291.
- etronidazole***, antibiotic sensitivity testing, anaerobic bacteria, clinical isolates 6549.
- etronidazole***, antibiotic synergism, gentamicin, *Bacteroides melanogenicus*, *Bacteroides fragilis* 3118.
- etronidazole***, bactericidal activity, inhibition, DNA biosynthesis, *Bacteroides fragilis* 2213.
- etronidazole***, bactericidal activity mechanisms 3053.
- etronidazole***, comparison, niridazole, antibacterial activity, *Campylobacter fetus* subsp. *jejuni* 3124.
- etronidazole***, drug sensitivity testing, anaerobic bacteria, microaerophilic bacteria, clinical isolates 4731.
- etronidazole***, interaction, *Escherichia coli*, DNA repair, mutants 2312.
- etronidazole***, reduction, effects on cytotoxicity, *Escherichia coli* 6451.
- etronidazole***, synergism, ampicillin, cotrimoxazole, cotrimoxazole, antibacterial activity, anaerobic bacteria 7366.
- etroxyfuran sagu***, starch, utilization, fungi 8886.
- etruzin***, *Azospirillum* rhizosphere, Gramineae, subtropical zones 4634.
- etruzin***, drinking water, lakes, microbial pollution, enterovirus, rotavirus 7526.
- etruzin***, food, gram-negative bacteria isolation, drug resistance 437.
- etruzin***, incidence, geographical distribution, *Puccinia graminis* races, isolation, *Avena sativa*, *Triticum aestivum* 1125.
- etruzin***, *Marsipulus*, leafspot, stalk rot, *Zea mays* 8794.
- etruzin***, oncoherciosis vectors, biological control, streams, *Simulium ochraceum*, *Bacillus thuringiensis* 6915.
- etruzin***, antibacterial activity, *Escherichia coli*, *Listeria monocytogenes* 4884.
- etruzin***, antibacterial activity, gram-negative bacilli 7431.
- etruzin***, antibiotic resistance, β -lactamase, role, *Staphylococcus aureus* 3008.
- etruzin***, antibiotic sensitivity testing, clavulanic acid effects on, *Bacteroides fragilis* 9164.
- etruzin***, antibiotic sensitivity testing, *Streptococcus faecalis* 4808.
- etruzin***, \pm gentamicin, antibacterial activity, *Streptococcus faecalis* endocarditis,
- Mezocillin***, (continued), animal models 4838.
- Mezocillin***, \pm moxalactam \pm amikacin \pm cefoxitin, antibacterial activity, bactericidal activity 7412.
- Mezocillin***, \pm isomycin, antibiotic synergism, antibacterial activity, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa* 2271.
- Mezocillin***, *Streptococcus* group B susceptibility 1381.
- Micelles***, proteins, hepatitis B virus, isolation, immunogenicity, vaccines, Pan troglodytes 6642.
- Michaelis-Menten parameters***, mathematical models, growth, microorganisms 7654.
- Miconazole***, antifungal activity, *Candida* 4753.
- Miconazole***, antifungal activity, *Conidiobolus*, *Basidiobolus* 7380.
- Miconazole***, antifungal activity, ergosterol effects on plasma membranes, *Candida albicans* 4757.
- Miconazole***, antifungal activity, germ tubes formation, spore germination, *Trichophyton mentagrophytes* 5738.
- Miconazole***, antifungal activity, plasma membranes, vacuoles formation, *Trichophyton mentagrophytes* 9109.
- Miconazole***, antifungal activity, *Rhizoctonia*, *Paecilomyces lilacinus*, *Fusarium solani* 4016.
- Miconazole***, antifungal activity, *Candida* 5735.
- Miconazole***, effects on, growth, *Candida albicans* 4754.
- Miconazole***, susceptibility methodology, dermatophyte fungi 1336.
- Micro-Media Enteric System***, drug sensitivity testing, anaerobic bacteria 1329.
- Microaerophilic bacteria***, clinical isolates, drug sensitivity testing, metronidazole, ornidazole 4731.
- Microbial pollution***, actinomycetes, fungi, odor intensity, relationship pH, oxygen, reservoirs 3212.
- Microbial pollution***, actinomycetes, odor compounds, chemical composition, odor pollution 2648.
- Microbial pollution***, bacteria, lakes, runoff, pollution monitoring, mathematical models 565.
- Microbial pollution***, bacteria, pathogens, estuaries 6713.
- Microbial pollution***, *Clostridium perfringens* spores, indicator species, sewage, spatial distribution, sediments, lakes 2388.
- Microbial pollution***, coastal waters, indicator species, sewage outfalls 6711.
- Microbial pollution***, coliforms, bioaccumulation, *Chamaelea gallina*, coastal waters 4128.
- Microbial pollution***, coliforms, pollution monitoring, indicator species, spatial distribution, seasonal variations, lakes, USA 8419.
- Microbial pollution***, coliforms, pollution monitoring, mathematical models, estuaries, coastal waters 3210.
- Microbial pollution***, drinking water, indicator species, coliforms, membrane filtration 8421.
- Microbial pollution***, enterovirus, association, suspended matter, lakes 9255.
- Microbial pollution***, enterovirus, comparison, bacteria indicator species, swimming pools, Romania 2409.
- Microbial pollution***, enterovirus, drinking water, phages use pollution indicators association 8425.
- Microbial pollution***, enterovirus, ground water, waste water irrigation 5852.
- Microbial pollution***, enterovirus, indicator species, seasonal variations, coastal waters, beaches 6706.
- Microbial pollution***, enterovirus, rotavirus, drinking water, lakes, Mexico 7526.
- Microbial pollution***, indicator species, chlorination, swimming pools 567.
- Microbial pollution***, indicator species, drainage, water quality, soil amendment, manure, crop fields 6709.
- Microbial pollution***, indicator species, sewage effluents, hydrology, estuaries 6710.
- Microbial pollution***, indicator species, water analysis, reviews, bibliographies 4945.
- Microbial pollution***, industrial effluents, mining, metals 415.
- Microbial pollution***, pathogens, water analysis, reviews, bibliographies 4946.
- Microbial pollution***, pollution monitoring, indicator species, bacteria, coastal waters 2400.
- Microbial pollution***, public health, environmental hygiene, conferences 7642.
- Microbial pollution***, rivers, Aves, lake coliforms, Canada 1502.
- Microbial pollution***, *Salmonella*, rivers 4129.
- Microbial pollution***, *Salmonella*, water analysis, most probable number 3218.
- Microbial pollution***, surface water, pollution detection, fecal coliforms, enumeration, pour-plate method 2397.
- Microbial pollution***, viruses, adsorption, survival, temperature effects on, ground water 5858.
- Microbial pollution***, viruses, environmental monitoring, measuring techniques, reviews 2387.
- Microbial pollution***, viruses, public health risks, standards, environmental monitoring, reviews, books 2537.
- Microbial pollution***, viruses, rivers, Romania 2406.
- Microbial pollution***, viruses, sewage sludge, effluents, land disposal, reviews 2335.
- Microbial pollution***, viruses, waste water aerosols irrigation, public health risks, reviews 2336.
- Microbial pollution***, wastewater treatment aerosols, pollution research 3187.
- Microbial pollution***, wastewater treatment, disinfection, ozone, enterovirus 2372.
- Microbial pollution***, water analysis, potentiometry, lipoid acid reduction, fecal coliforms, indicator species 2392.
- Microbial pollution***, water pollution, reviews, bibliographies 4944.
- Microbiology***, bacteria, contamination, meat, public health 4458.
- Microbiology***, desalination plants, physicochemical properties, water quality, bacteria 4942.
- Microbiology***, equipment, design effects on contamination 583.
- Microbiology***, industries, methodology, biotechnology, books 4237.
- Micrococci***, antibiotic resistance mutants, ribosomal protein L11 structure, *Bacillus megaterium* 6432.
- Micrococcus***, biodegradation, benzoic acid derivatives 3664.
- Micrococcus***, biodegradation, phenanthrene, naphthalene 1294.
- Micrococcus***, biodegradation, phthalic acid, reviews 7828.
- Micrococcus***, catalase isoenzymes, purification, characterization 1793.
- Micrococcus***, differentiation, *Staphylococcus*, bacitracin antibacterial activity, agar diffusion test 1661.
- Micrococcus***, proteolytic enzymes, dairy products isolates 1057.
- Micrococcus***, radioresistance, dying, effects on 4718.
- Micrococcus***, skin microflora, antiseptics disinfection, animal models 4141.
- Micrococcus***, Staphylococcus, identification, methodology, comparison 7613.
- Micrococcus***, thermal stability, catalase, histidine decarboxylase 8594.
- Micrococcus luteus***, antibacterial activity, extracts, *Baccharis crispa*, *Baccharis notoserгия* 4012.
- Micrococcus luteus***, drug, toxins production, sodium chloride effects on 8760.
- Micrococcus luteus***, hydrolysis, ampicillin esters, bioassays 2265.
- Micrococcus luteus***, β -ionone, derivatives, retinol, antibacterial activity 6491.
- Micrococcus luteus***, manganese, deficiency, effects on, DNA biosynthesis, precursors, nucleotides, fermentation 951.

- Micrococcus lysodeikticus**,
dellonin effects on cell membranes 7355.
dioxidine effects on cell membranes 8306.
DNA, cesium trifluoroacetate, use, isolation, purification, methodology 5918.
protoplasts, gramicidin S cytotoxicity 7467.
- Micrococcus peritremis**,
aromatic-L-amino-acid decarboxylase, pyridoxal 5'-phosphate requirements 1817.
- Micrococcus pseudoflavescens**,
pathogens, biological control, larvae, *Lymantria dispar* 5260.
- Micrococcus radiodurans**,
radioreistance, dying, effects on 4718.
- Micrococcus roseus**,
bacteriocinogeny 6550.
- Micrococcus varians**,
L-lysine production, hydrocarbons utilization 1732.
- Micrococcus**,
reactors, cutting fluids biodegradation, bacteria identification 178.
- Microplasma periplasma**,
isolation, *Albugo solvifolium* 8017.
- Microdochium bolleyi**,
melanin production 8626.
- Microellobosporia grisea**,
D-manno-D-glucan, carbohydrate composition, structure-activity relationships,
antitumor activity, solid tumors, mice 4376.
- Microenvironments**,
drugs levels, relationship, microorganisms growth inhibition 1352.
- Microfibrils**,
formation, cellulose hydrolysis, cellulase, *Trichoderma reesei* 3472.
- Microfilaments**,
growth, isolation, characterization, plasmidia, *Physarum polycephalum* 5954.
- Microflora**,
bacteria, antibiotic resistance, neonates, man 7332.
bacteria, electrical stimulation, sodium chloride, sodium nitrite effects on,
beef 6976.
bacteria, man burn infection, antibiotic sensitivity testing 3084.
bacteria, skin, counting methods, cattle 4138.
eye, cefmenoxime antibacterial activity, man 7546.
hair, bacteria contamination, swimming pools 2405.
skin, antiseptics disinfection, animal models 4141.
skin, neonates, relationship, baths, washing, man 6729.
skin, sampling, methodology, reviews 4964.
succession, *Acer pseudoplatanus* phytophane 8936.
urinary tract isolates, bacteria, antibiotic sensitivity testing 6501.
yeasts, bakery products, USSR 191.
- Microinjection**,
interferon antibodies, effects on, interferon, antiviral activity 9111.
- Micromonospora**,
dapiromycin A, dapiromycin B, structure, biosynthesis, disease control, sheath
blight, *Rhizoctonia solani*, *Oryza sativa* 4863.
distribution, incidence, pasture, nematocides effects on 7295.
p-D-glucuronidase inhibitors, purification, characterization 5105.
protection, β -lactamase inhibitors, screening 3082.
taxonomy, dapiromycin, fermentation, antifungal activity 2286.
- Micromonospora chalcsea**,
propanosine biosynthesis, structure, characterization, antifungal activity, *Valsa
ceratosperma* 3149.
- Micromonospora echinospora subsp. challeensis**,
hazimins, antifungal activity, antibacterial activity 2294.
- Micronutrients**,
foliar applications, effects on *Exserohilum rostratum* leafspot, *Chrysoidocarpus
lutescens* 3910.
- Microorganism**,
acid phosphatase stimulation, *Lumbricidae* activity, activated sludge 7265.
activated sludge, kinetics, design, wastewater treatment 4925.
aerosols, particulate pollution, association, harvesting machinery, measuring
techniques, mathematical models 3229.
amino acids biosynthesis, gene regulation, books 3371.
 α -amylase, β -amylase, α -D-glucosidase, biotechnology, reviews,
microorganisms 2596.
 α -amylase, starch hydrolysis, food industry 51.
analysis, pharmaceuticals, syrups 4136.
antibiotics biosynthesis, gene regulation, books 3374.
antibiotics biosynthesis, genetic engineering 5764.
antibiotics biosynthesis, pH levels 2246.
antibiotics production, biotechnology, books 5091.
aquatic communities, toxicants effects on metabolism, measurements methodology
1535.
association, flagella, rotation, measuring techniques 4975.
batch culture, fermentation, models, kinetics 3631.
bioaccumulation, metals, leaching, reviews 5692.
biodegradability, pyridines, nitrofluoroacetic acid, dodecylbenzene, stearic acid,
solubility 6156.
biodegradation, *Abies alba* leaves 181.
biodegradation, allyl alcohol 4434.
biodegradation, aniline, dodecyl benzene sulfonate, characterization 1033.
biodegradation, aromatic compounds+halogens, mechanisms, reviews 7826.
biodegradation, books 1683.
biodegradation, dissolved oxygen, organic matter, biochemical oxygen demand,
biomass, ATP, waste water, rivers 1454.
biodegradation, forests, litter, wood 5537.
biodegradation, industrial wastes, soil pollution, reviews 1018.
biodegradation, industrial wastes, substrates, haloaromatics 3207.
biodegradation, interaction carbon (activated) adsorption, water treatment 7646.
biodegradation, leoprotum, persistence, soil 4630.
biodegradation, land disposal soil pollution 4120.
biodegradation, lignocelluloses, lignin, polysaccharides, *Spartina alterniflora*,
Rhizophora mangle 5305.
biodegradation, macrophytes, lignocelluloses 2704.
biodegradation, metabolism, alkylic alkanes, reviews 8281.
biodegradation, metabolism, alkanes, reviews 8280.
biodegradation, metabolism, aromatic hydrocarbons, reviews 8282.
biodegradation, metabolism, hydrocarbons, gases, reviews 8283.
biodegradation, oil and gas industry effluents, effects on, USA, Wyoming rivers
9038.
- Microorganisms, (continued)**
biodegradation, organic matter, succession, community development, soil, reviews
4625.
biodegradation, petroleum, pollution effects, books 8497.
biodegradation, petroleum, reviews 8287.
biodegradation, phthalic acid esters, relationship, carbon dioxide, production
3660.
biodegradation, physicochemical properties, peatlands 2152.
biodegradation, plants toxins effects on 8970.
biodegradation, *Pseudotsuga menziesii*, lignocelluloses, streams, factors
affecting 999.
biodegradation, straw residues, soil, factor affecting 7249.
biodegradation, trihalomethanes removal, ozone+carbon (activated), water
treatment 7497.
biodegradation, wood, lignin, cellulose, reviews 4436.
biodegradation, polyurethanes susceptibility 2719.
biochemistry, books 8493.
biological activity, resazurin reduction monitoring, activated sludge 549.
biological control, insects 2673.
biological control, insects 8639.
biological control, insects, reviews 6077.
biomass, enumeration, measuring techniques, reviews 4973.
biomass production, slurries, media (enrichment) 7508.
bioreactors, temperature kinetics 1534.
biosynthesis, antibiotics, steroids, ethanol, sweeteners, polysaccharides, books
2541.
biosynthesis, chitosan, chitin, cellulose, industrial applications, reviews 8619.
biotechnology, genetic engineering 5206.
biotechnology, industries, conferences 5860.
carbohydrates conversion, ethanol production, reviews 5272.
carbon cycle, reviews 8205.
cell culture, biotechnology, reviews 4970.
cell culture, freeze drying 4146.
cell culture growth, enumeration methodology 4193.
cellulase, lignocelluloses hydrolysis, use sugar fermentation, reviews 2599.
cellulolytic enzymes, ethanol fermentation, fuels 162.
cellulolytic enzymes, pectinolytic enzymes, crop residues conversion, silage,
fermentation 213.
cellulolytic enzymes, proteolytic enzymes, pectinolytic enzymes, cleaning,
membranes, filtration, industrial water systems 57.
chemostats, mathematical models, growth curves 9269.
climax community characterization, activated sludge 1491.
clinical isolates, detection methodology, books 3378.
cocoa fermentation, biochemical analysis 7848.
colonization, biodegradation, forest products, relationship, catalase,
activity, cresote, effects on 1243.
colonization, titanium surfaces, rivers water exposure 3650.
commercial soil amendment, effects on *Triticum aestivum* growth, yield 8960.
contamination, beer, reviews 6147.
contamination, blood culture, quality control 4036.
contamination, breast milk heat treatments, nutritional status, immune status,
infants, man 7038.
contamination, cucumbers, chlorine dioxide control 8051.
contamination, enzyme-linked immunosorbent assay equipment, environmental hygiene
2413.
contamination, fishery products, temperature effects on 7002.
contamination, hygiene standards, minced meat 5318.
contamination, mayonnaise salad dressings 7847.
contamination, molasses, continuous culture, ethanol, production, immobilized
cells, yeast 7739.
contamination, pasteurization, cooling water, beverages 1913.
contamination, pharmaceuticals industries 9147.
contamination, pharmaceuticals, nosocomial environments, reviews 9149.
contamination, pharmaceuticals, quality control, reviews 9150.
contamination, pharmaceuticals, reviews 9148.
contamination, pharmaceuticals sterilization quality control, reviews 9146.
contamination, solid wastes, hospitals 4963.
continuous culture, conferences 1685.
conversion, hydrodynamics, aqueous solutions, solvents 3687.
conversion, organic matter, wastes, biomass, production, use, rural populations,
rural environments, books 6794.
corn silage biodegradation, aerobic conditions 5360.
cosmetics, contamination 5751.
counts, crop, meat production 7841.
crop residues fermentation, methane production, reviews 5703.
culture collections, brewing, patents 6934.
culture, factors affecting growth, metabolism 9272.
culture systems, gases delineation, mass spectroscopy methodology 4144.
dairy starters, cheese production, biotechnology 5328.
decomposition, organic matter, carbon (activated), filters, wastewater treatment
2349.
digestion (anaerobic), animal wastes, oxygen, effects on, methanogenesis 8407.
digestion (anaerobic), wood biodegradation, energy resources, batch culture 3655.
disease resistance, plant breeding, research programs 1176.
disinfection, extraction, use pressure 4972.
dough fermentation, bakery products 5328.
ecological evaluation, laboratories, continuous culture, batch culture,
methodology 4974.
ecosystem analysis, interspecies relationships, isolation, media (culture),
measuring techniques, reviews, books 5092.
enumeration, methodology, nosocomial environments, air conditioning 5863.
enumeration, oranges juices frozen products 7850.
enzymes, applications, biotechnology, industries, books 3373.
enzymes, digestion (anaerobic), digestion (aerobic), waste treatment, industrial
wastes 547.
enzymes, drilling fluids, viscosity, oil and gas industry, wastewater treatment,
biodegradation, oil spills, waste environment 180.
enzymes, industries, books 839.
enzymes, mash fermentation, breweries 163.
enzymes, oils extraction, oilseed crops 54.
enzymes, pesticides biodegradation, reviews 1019.
enzymes, physicochemical properties, activity, surveys, industries 58.
enzymes, production color compounds, flavor compounds, food industry 200.
enzymes, production, reviews 2627.
enzymes, toxicity testing, safety regulations, enzymes 44.
enzymes, use assays, clinical microbiology, microorganisms 46.

Microorganisms, (continued)

- epoxidation, halogenation 7653.
 ethanol biosynthesis, screening methodology 4171.
 ethanol, production, fermentation, reviews 8110.
 ethanol, enzymes, purification, molecular weight, chromatography 5159.
 fermentation, bioreactors, reviews 5875.
 fermentation, coffee 5324.
 fermentation energetics 3678.
 fermentation, feeds 5353.
 fermentation, metabolites, biotechnology 7652.
 fermentation processes: computer applications 2551.
 fermentation strains improvements, genetic engineering, reviews 6124.
 fermentation, wine, organic compounds, acids effects on 8672.
 fermented food, olives 5331.
 fermented food, reviews 5325.
 fermented milk products 5329.
 films, formation, bioreactors, kinetics 3205.
 films formation, pure culture, mixed culture, mathematical models, fermenters 9270.
 films, substrates kinetics, mathematical models, wastewater treatment 1461.
 films, tubes plastics drinking water 9448.
 filters, aeration, carbon (activated), waste treatment 6698.
 food, bioassays, methodology, books 9336.
 food contamination, books 3368.
 food contamination, books, conferences 4246.
 food fermentation, biotechnology, books 5941.
 genetic engineering, detoxification, chlorinated hydrocarbons 4089.
 genetic engineering, detoxification, waste treatment, research programs 4088.
 genetic engineering, releases, marine environment, estuaries, role, biodegradation, chemical pollution 3681.
 genetic engineering, use, chemical pollution biodegradation, ecological evaluation 3685.
 genetic engineering, use, industrial wastes pollution control 4125.
 genetic engineering, use, waste treatment 4126.
 genetic engineering, use, waste treatment 4127.
 genetic engineering, use, waste treatment, chemical pollution biodegradation, books, conferences 3392.
 genetic engineering, waste treatment, fermentation, digestion (anaerobic), single-cell protein, ethanol, production, characterization, books, conferences 8500.
 p-D-glucosidase, reviews 8567.
 growth, association, fermentation, kinetics mathematical models 2530.
 growth, filters, use, gases waste treatment, organic compounds removal 3188.
 growth, inhibition, relationship, microenvironments drugs levels 1352.
 growth, Michaelis-Menten parameters, mathematical models 7654.
 growth models, kinetics, energetics, reviews 2427.
 growth, population dynamics, mathematical models 5953.
 growth rate, measuring techniques, use, bioreactors 2428.
 growth, urine culture, liquids comparison freeze drying preservatives effects on 3268.
 humus formation, pathway 8965.
 hydrocarbons production, aerobic conditions 9034.
 identification, methodology, clinical microbiology, reviews 3232.
 immobilized cells, biotechnology, reviews 4976.
 immobilized cells, books 4232.
 immobilized cells, characterization, books 3379.
 immobilized cells, mathematical models, diffusion, factors affecting 1528.
 immobilized cells, reviews 5102.
 immobilized enzymes, glucose isomerization, sweeteners production, starch, Zea mays 5188.
 immobilized enzymes, use, catalysis, chemicals, production, reviews 6031.
 industrial strains, mutagenesis, screening, fermentation, yield 1837.
 infection, seeds, pathology, conferences, books 3398.
 interaction, clays, minerals, soil, reviews 4624.
 interaction, rhizosphere, plants, characterization, reviews 4627.
 iron, biogeochemistry, nutrient cycles, reviews 8208.
 levels, buildings biodegradation 2720.
 lignin, biodegradation 2725.
 lignin biodegradation 7820.
 lignocelluloses biodegradation, enzymatic activity 3688.
 low molecular weight proteinase inhibitors, membranes binding, reviews 5184.
 manganese, biogeochemistry, nutrients, reviews 8209.
 metabolism, books 1884.
 metabolites, biotechnology 2636.
 metals leaching, biotechnology 6393.
 mineralization, nitrogen, soil, factors affecting, reviews 4653.
 mixed culture interaction, reviews 1531.
 monitoring, hatcheries sanitation 2330.
 nitrogen cycle, colonies, Eudypates chrysophilus, Aptenodytes patagonicus 9003.
 nitrogen cycle, reviews 8240.
 nitrogen fixation, agriculture, crop fields 9345.
 organic compounds biodegradation, wastewater treatment, industrial effluents 4090.
 organic compounds, formic acid, effects on, hay, preservation 6490.
 organic matter decomposition, biogeochemistry, nutrient dynamics, ecosystem analysis, reviews, peatlands 7254.
 oxidation, organic compounds, oil and gas industry wastewater treatment, tar+ sand combustion 3194.
 oxygenation, fermenters 3230.
 pathogenesis, plant diseases 4493.
 PCB sorption, soil 388.
 pectinolytic enzymes, wine 164.
 pharmaceuticals, contamination, production, antibiotics, antimicrobial agents, antimicrobial activity, books 9343.
 pharmaceuticals production, genetic engineering 8652.
 phosphorus 31 metabolism, N.M.R., wastewater treatment 4092.
 plant debris, litter decomposition, humus production, Pinus pumila 3952.
 plant diseases, diagnosis, genetic engineering, electrophoresis, monoclonal antibodies, methodology 7921.
 plant diseases, virulence, pathology, reviews 4492.
 polysaccharides, industrial applications, books 9342.
 population dynamics 4105.
 production, enzymes, genetic engineering 7730.
 proteinase, industries, reviews 2602.
 proteinase inhibitors production, screening methodology 7657.
 6-pyrazolo benzoxazoles, 6-isoxazolo benzoxazoles, antimicrobial activity,

Microorganisms, (continued)

- characterization 8340.
 recovery, fermenters, methodology, reviews 7655.
 removal, nutrients, heavy metals, waste water 3202.
 reviews, filtration, separation, proteins, enzymes 5586.
 role, flavor compounds production, dry meat products 3700.
 role, food chains, nutrient cycles, ecological distribution, books 4238.
 role, hydrocarbons, biodegradation, soil, sewage sludge, applications 4686.
 role, revegetation, land reclamation, coal mines industrial wastes, soil amendment 3955.
 role, solubilization, laboratory methods, oil shales 9029.
 role, waste disposal, industrial wastes, reviews 6704.
 role, wastewater treatment, sewage treatment, books 2540.
 role, yogurt production, quality control, books 5097.
 rotating discs, wastewater treatment, industrial effluents, dairy industry 6697.
 rumen, Digitaria pentzii cell walls degradation 4428.
 screening, culture genetic engineering association enzymes production 4137.
 secondary metabolites, differentiation regulation, use pharmaceuticals 965.
 sediments analysis, cooling towers 561.
 silicon, biogeochemistry, nutrient cycles, reviews 8207.
 single-cell protein production, methanol carbon sources 1922.
 soaps contamination, cross-infection association, man 9267.
 soil, factor affecting 7249.
 spoilage, γ radiation prevention, silage, Zea mays 6202.
 spoilage, beverages, bottles, reviews 7872.
 spoilage, meat, books 1689.
 spoilage, tumbling effects on, ham 7857.
 spores, heat sterilization 1368.
 storage biodegradation, kinetics, polysaccharides biosynthesis 7266.
 succession, sewage sludge, composting, temperature, effects on 5819.
 sulfur, biogeochemistry, nutrient cycles, reviews 8206.
 supercooling methodology 9268.
 surfaces interaction, surfactants, reviews 4392.
 surfactants biosynthesis, metabolic pathways, reviews 7776.
 survival, heat penetration, baking, bread 6986.
 symbiosis, plants, nitrogen fixation measurements, soil diffusion 411.
 thermodynamics, energy utilization 853.
 toxins, phytotoxicity, reviews 3756.
 transient *Pseudomonas putida*, mathematical models 587.
 triacylglycerol lipase, extracellular enzymes, food industry, reviews 2600.
 use, commercial species, research programs, weed control, biological control 3896.
 use, enhancement, oil, recovery, methodology 8270.
 use, fermentation, products biosynthesis, books 5096.
 use, hazardous wastes waste treatment, books 1694.
 use, leaching, Minerals, methodology, reviews 8263.
 use, leaching, sewage treatment, reviews, books 5093.
 use, oil, recovery, methodology 8268.
 use, trickling filters, air pollution odor control 3200.
 viability, immobilized cells 4971.
 waste treatment, feeds 5351.
 waste treatment, food processing by-products 5320.
 wastes, biochemical oxygen demand, chemical oxygen demand, measuring techniques, enumeration, waste water, biochemical characteristics, reviews 4918.
 wastewater treatment, kinetics, diffusion, models 2346.
 wastewater treatment, pentachlorophenol, industrial effluents 556.
 wastewater treatment, role, removal, nitrogen, phosphorus 3190.
 weathering, biogeochemistry, reviews 8210.
Microspolyspora faeni,
 dust, isolation, enumeration, methodology comparison 1646.
Microscopy,
 4147.
 Cryptococcus neoformans, phagocytosis, staining,
 (4'-6-diamidino-2-phenylindole)-fluorochrome 2524.
 fluorescence, Rhizobium leguminosarum var. trifolii, detection, protoplasts,
 Trifolium repens 9297.
 fluorescence stains, nuclear division, mitosis, Tulasnella araneosa 9330.
 fluorescent antibody test, detection, Mycobacterium leprae, leprosy 5904.
 Fusarium oxysporum f.sp. lini, soil, in situ, fluorescence 1287.
 immunofluorescence, antisera, Corynebacterium sepedonicum, cross-reactivity, soil
 microorganisms, association, Solanum tuberosum 7186.
 immunofluorescence, Phaeolus schweinitzii, propagules, identification, detection,
 soil 4621.
 mycorrhizas, fixation methodology, reviews 834.
Microsomes,
 hydroxylase purification, characterization, cell culture, Aspergillus ochraceus
 5124.
Microsphepha aliphoides,
 infection, Quercus ilex, polyprenols biosynthesis relationship 2825.
Microsphepha penicillata,
 powdery mildew, Quarea illinoensis, effects on photosynthesis 5446.
Microsporon canis,
 antifungal activity, 2-methylquinolines 5740.
Microsporum cookei,
 antifungal activity, sesquiterpenes 8317.
Microsporum gypseum,
 antifungal activity, amino acids 9106.
 glycerol kinase, purification, characterization, molecular weight 5987.
 mating types, ecological distribution, soil, Spain 8980.
 phospholipids biosynthesis 1851.
 soil microorganisms, Spain 6336.
 toxicity, Ageratum houstonianum essential oils 5505.
Microtia,
 sclerotic, Vitellium dahliae, structure, Solanum tuberosum 7936.
Microwave oven,
 cooking, poultry, inactivation, Salmonella typhimurium, Staphylococcus aureus
 1046.
Microwave radiation,
 decontamination, Salmonella, feeds, chickens 1066.
 pretreatment, Orzya sativa straw, bagasse, microwave radiation, cellulose,
 Trichoderma viride 5128.
 soil, effects on soil microorganisms 3361.
 sterilization, food, laminar air flow nosocomial environments, man 574.
Mildew,
 avirulent Erysiphe graminis f.sp. hordei, inoculation, induction disease
 resistance 3882.
 Sphaerotheca panacea, disease resistance, plant breeding, Rosa 8096.

Mildomycin D.

Streptovorticillium rimofaciens biosynthesis, structure, antifungal activity 8373.

Milk.

- amines, lactic acid bacteria, dairy starters 6962.
Bacillus, fatty acids production 1909.
 bacteria, contamination, measuring techniques, ecological distribution, reviews 1897.
 bacteria spoilage, shelf life predictions, refrigeration 6174.
 buffaloes, yogurt, dairy starters, *Lactobacillus bulgaricus*, *Streptococcus thermophilus* 6989.
 cattle, buffaloes, isolation, casein, substrates, *Aspergillus* growth, aflatoxins biosynthesis 7078.
 cattle, *Staphylococcus aureus* isolates, drug sensitivity testing 6462.
 cold storage, pasteurization, spoilage, bacteria 1910.
 coliforms contamination, detection methodology 4445.
 coliforms spoilage, cold storage, pasteurization, lactoperoxidase 1912.
 contamination, psychrotrophic bacteria proteinase production, nitrogen effects on 7849.
 contamination, *Salmonella* detection, enzyme-linked immunosorbent assay, methodology 766.
 contamination, salmonellosis, cost-benefit analysis, man 4449.
 curdling, chymosin, immobilized enzymes, mucor 205.
 dairy starters, counting methods, ATP assays 6996.
 dairy starters, inhibition 7862.
 detection, bacteria, methodology, reviews 207.
Escherichia coli incidence, identification 8708.
 fermentation, biosynthesis, fatty acids, lipids, dairy starters 7865.
 fermentation, continuous culture, dairy starters, yogurt production, lactic acid bacteria 6997.
 fermentation, lactose, genes, cloning, role 2739.
 food contamination, *Yersinia enterocolitica* 7004.
 goats, bacteria content 6973.
 heating, refrigeration, *Corynebacterium* identification 6998.
 isolation, bacteria, antagonism, *Staphylococcus aureus* growth, Enterotoxins biosynthesis 8707.
 isolation, *Campylobacter jejuni*, sodium bisulfite stimulation survival 4459.
 lactic acid production, growth, measuring techniques, *Streptococcus cremoris* 7867.
 lactose, hydrolysis, β -D-galactosidase, immobilized enzymes, *Escherichia coli* 8542.
 pasteurization, shelf life, refrigeration, proteolytic enzymes, bacteria spoilage 6175.
 phenolase, effects on phages contamination, dairy starters, *Lactobacillus bulgaricus* 3716.
 processing, hygiene, quality control 7001.
 proteolysis, *Streptococcus cremoris*, proteinase, plasma membranes localization, role peptides transport 1747.
Pseudomonas fluorescens triacylglycerol lipase, fluorometry 21.
 psychrotrophic bacteria enumeration, automated methods, electrical impedance 5315.
 relationship, cheese contamination 5348.
 residues, effects on detergents antibacterial activity, *Escherichia coli* 9264.
 samples, *Salmonella* detection methodology, phage O1 use 1573.
 shelf life, organoleptic evaluation, off flavor, spoilage, coliforms 4448.
 spoilage, smells, *Klebsiella oxytoca*, *Pseudomonas aeruginosa* 6176.
 storage tanks, cleaning systems, contamination, bacteria 1505.
 ultrafiltration, fermentation, single-cell protein, nutritive value, pigs 1916.
 ultrafiltration, lactose fermentation, single-cell protein, *Trichosporon cutaneum* 1719.
 xanthine oxidase, hypoxanthine, hydrogen, inhibition, dairy starters 7863.
Milk products.
Escherichia coli incidence, identification 8708.
 Penicillium roqueforti, use, cheese, production 2734.
 production, role, lactic acid bacteria proteolytic enzymes, reviews 96.
Salmonella isolation, methodology 6182.
 spoilage, bacteria 6964.
Milk-clotting enzymes.
 cheese, production *Mucor racemosus* 3695.
 gel electrophoresis, *Mucor miehei*, *Mucor pusillus*, *Endothia parasitica* 6876.
 immobilization methodology, *Russula decolorans* 4317.
 purification, affinity chromatography, *Endothia parasitica*, *Mucor miehei* 62.
Milking machines.
 disease control, mastitis, cattle 571.
 disinfection, mastitis disease control, cattle 9260.
Minced meat.
 beef, textured soy protein, acidification effects on bacteria growth, spoilage 6987.
 food contamination, bacteria 203.
 freeze drying, *Staphylococcus aureus* survival, factor affecting 7037.
 microorganisms contamination, standards, hygiene 5318.
 pork, *Clostridium botulinum* toxins inhibition, iron chelating agents, nitric oxide, carbon monoxide 7035.
Mineralization.
 carbon, nitrogen, association, organic matter, forests soil 8145.
 carbon, nitrogen, humus, soil pH 5658.
 cellulose, role, chitin, soil microorganisms 4631.
 lignin, *Spartina alterniflora*, *Juncus roemerianus*, *Pinus elliotii*, role, fungi, marine environment 1026.
 nitrogen cycle, rain forests, succession, Costa Rica 4612.
 nitrogen, fertilizer applications, forests, *Pinus radiata* 5541.
 nitrogen, soil, factors affecting, microorganisms, reviews 4653.
 nutrient cycles, soil microorganisms, fallow land, crop production (no-tillage), crop fields, *Triticum aestivum* 5668.
 organic matter, soil microorganisms, savannahs, tropical environment, ecosystem dynamics 2941.
 soil microorganisms biomass, nutrient cycles, carbon, nitrogen, paddy fields 5632.
 sulfur, soil microorganisms, forests 1230.
Minerals.
 bacteria, biodegradation, *Crasostrea gigas*, shells 4439.
 clays, interaction, microorganisms, soil, reviews 4624.
 leaching, use, microorganisms, methodology, reviews 8263.
 nutritive value, meals, soybeans+corn, fermentation effects on, lactic acid bacteria 5355.
 sulfide, oxidation, thermophilic bacteria, acidophilic bacteria 416.

Minerals, (continued)

uptake, *Citrus paradisi*, blight, effects on 5439.

Mites.

- acids drainage, pollution effects, leaf litter decomposition, reservoirs, bacteria 4429.
 coal, industrial wastes, soil amendment, land reclamation, revegetation, microorganisms, role 3955.
 Coniferaleae seedlings, high-altitude environments, ectomycorrhizas formation 5547.
Pseudomonas stutzeri isolates, silver resistance 4698.
 soil disturbance, soil amendment, fungi, saprophytes, roots colonization 8230.
 soil, land reclamation, *Psilolithus tinctorius*, ectomycorrhizas, colonization, seedlings, *Pinus* 8931.
Mini-rhizotron.
 +boreoscope, observation methods, *Phymatrolaria omnivorum*, host-parasite interactions, *Gossypium hirsutum* 2926.
Miniatomycin.
 production, *Streptomyces coeruleorubidus* 4377.
Mining.
 association, *Thiobacillus*, plasmid pT11, transformation 8262.
 leaching, iron(III) oxidation, pyrite, iron-oxidizing bacteria 5689.
 metals, industrial effluents, microbial pollution, 415.
 waste disposal sites, land reclamation, soil microorganisms 4676.
 wastes, soil microorganisms population levels, calcium oxide, organic matter, soil amendment effects on 3971.
Minitek test.
 identification, clinical isolates, anaerobic bacteria 7595.
Minocycline.
 +antitubercular agents, antibacterial activity, *Mycobacterium tuberculosis* 4722.
 Nocardia asteroides antibiotic sensitivity testing 3090.
 Ureaplasma urealyticum resistance, clinical isolates 3020.
Miokamycin.
 antibacterial activity, *Mycoplasma hominis*, *Ureaplasma urealyticum*, *Chlamydia trachomatis* 8368.
 bactericidal activity, gram-positive cocci 3151.
Mirlin.
 biosynthesis, enzymes preparations efficacy, alcohol concentration relationship 7867.
Miconidazole.
 reduction, effects on cytotoxicity, *Escherichia coli* 6451.
Mitochondria.
 adenosinetriphosphatase inhibitor content, binding adenosinetriphosphatase 905.
 calcium transport, Zea mays, inhibition, T toxin, *Helminthosporium maydis* 7155.
Cochliobolus heterostrophus DNA, isolation methodology 3365.
 cytochrome c oxidase, amino acid sequence, homology *Paracoccus denitrificans* 89.
 DNA, isolation methodology, yeasts 5088.
 lipoxigenase, purification, characterization, *Saccharomyces cerevisiae* 913.
 oxidative phosphorylation uncouplers, averufin 4472.
 phenylalanyl-tRNA synthetase, carbohydrate composition, comparison mitochondria *Saccharomyces cerevisiae* 930.
 respiratory enzymes, induction, n-alkanes metabolism, *Lodderomyces* 7307.
Saccharomyces cerevisiae growth, econazole nitrate effects on 1338.
 yeasts, tRNA, characterization, use, gels electrophoresis, methodology 3362.
Mitogenicity.
 Streptococcus pyogenes toxins, isoelectric focusing 2764.
Mitomycin.
 acidity, physicochemical properties 1840.
 stability, size groups, acidity, physicochemical properties 1839.
Mitomycin C.
 +dextran conjugates, antibacterial activity regeneration 455.
 glucose isomerase production, *Streptomyces fradiae* 8598.
 N.M.R., structure 524.
Mitosis.
 nuclear division, *Tulasnella araneosa*, fluorescence stains, microscopy 9330.
Models.
 Puccinia striiformis stripe rust, *Triticum aestivum*, USA, Pacific Northwest 252.
Molasses.
 carbon sources, nitrogen sources, biomass production, ethanol fermentation, *Saccharomyces cerevisiae* 3607.
 conversion, hydrogen production, immobilized cells, *Clostridium butyricum* 3577.
 effects on, lactic acid bacteria acid production, silage fermentation, Zea mays 7873.
 feeds, contamination, yeasts immobilized cells bioreactors, yeasts fermentation 6123.
 fermentation, citric acid production, nutrient requirements, *Aspergillus niger* 8514.
 fermentation, ethanol production, immobilized cells, *Saccharomyces formosensis* 168.
 fermentation, ethanol production, immobilized cells, *Saccharomyces cerevisiae* 8659.
 fermentation, ethanol production, optimization, yeasts 8660.
 fermentation, ethanol production, *Saccharomyces cerevisiae*, immobilized cells 167.
 fermentation, industrial effluents, methanogenesis, digestion (anaerobic) 8401.
 Leucaena leucocephala, effects on fermentation 3724.
 microorganisms, contamination, continuous culture, ethanol, production, immobilized cells, yeasts 7799.
 substrates, *Kluyveromyces fragilis*, biomass, association, ethanol production, aerobic conditions 1069.
 yeasts use, microorganisms growth association, kinetics mathematical models 253.
Molds.
 air spora levels, wood processing 8195.
 airborne microorganisms, sampling, measuring techniques, incidence, reviews 80.
 biodegradation, monuments, chemical control 1029.
 biodegradation, paintings 1027.
 contamination, raw materials use production contamination 8342.
 detection, food processing, colorimetry methodology 6185.
 enumeration, food, methodology characterization 195.
 extracellular enzymes, oxidase, detection 1799.
 food contamination, chickens feeds, ingestion effects on body weight 7014.
 food contamination, corn, toxins production, water content, temperature, propionic acid, effects on 2749.
 food contamination, meat, growth conditions 6193.

Ioids, (continued)

- Gramineae, plant diseases, disease control, reviews 5430.
koji, soy sauce, spores inoculum production 196.
- Molecular weight,**
extracellular enzymes, purification, chromatography, microorganisms 5159.
fructose-bisphosphatase subunits, *Saccharomyces cerevisiae* 5130.
 α -D-galactosidase, *Aspergillus tamari* 5988.
glycerol kinase, *Microsporium gypseum*, *Epidermophyton floccosum* 5987.
lactase, *Polyporus anisoporus* 7722.
substrates, relationship kinetics, dextranase, *Flavobacterium* 8574.
- Myxoma aerona virus,**
v-mos gene vaccine, transformation inhibition, immunoglobulin G antisera, vaccines models 6648.
- Molybdenum,**
iron complex, substrate specificity, nitrogenase, spectroscopy, nitrogen-fixing bacteria 2607.
iron proteins, cofactors, nitrogenase, C.D., *Klebsiella pneumoniae* 5141.
iron sulfur complex, nitrogen binding, models, nitrogenase 2605.
nutrient requirements, *Aspergillus aflatoxins* biosynthesis 7068.
ores, oxidation, bacteria 9031.
sites, nitrate reductase, *Escherichia coli* 8554.
- Mordica charantia,**
antibiotic agents, antiviral activity, purification, characterization 5746.
- Mosses,**
immobilized cells, pigments production, food dyes 5238.
proteinase, purification, characterization 8593.
- Mosses purpureus,**
pigments production 5251.
- Monsieur,**
antibacterial activity, Clostridium, agar dilution test, animal isolates 3050.
biosynthesis, genetic engineering, *Streptomyces cinnamonensis* 6585.
urethanes derivatives, antimicrobial activity, *Candida albicans*, *Penicillium digitatum*, gram-positive bacteria 1436.
- Montia,**
 β -D-glucosidase, induction analysis 5184.
- Monilidiol,**
Monilia fructicola, synthesis 1953.
- Monilia fructicola,**
brown rot, post-harvest decay, *Bacillus subtilis*, biological control, fruits 8053.
conidia, air spora, samplers, epidemiology 804.
conidia, spore germination, size, pathogenicity, temperature effects on, in vitro, in vivo, fruits, *Prunus persica*, *Prunus persica nectarina* 7992.
moniliodi, dechloromonilidiol, synthesis 1953.
- Monilia laxa,**
benomyl resistance, *Prunus armeniaca*, detection, characterization 1139.
- Monothology, bacteria, ethanol, fermentation 994.**
- Monobactams,**
analogs, synthesis, antibacterial activity 1426.
binding, active sites, alanine peptidase, *Streptomyces*, *Actinomadura* 4274.
identification, spectroscopy 2283.
synthesis, antibacterial activity, gram-negative bacteria, gram-positive bacteria 6883.
- Monobutyl phthalate,**
biodegradation, soil microorganisms 8961.
- Monochloramine,**
rotavirus (simian) SA11 inactivation 8324.
- Monochlorobiphenyls,**
chemical pollution, biodegradation, rivers 185.
- Monocillium,**
isolation, transformation, rifamycins, characterization 2248.
- Monoclonal antibodies,**
antiviral activity, Venezuelan equine encephalitis virus 2328.
capture enzyme-linked immunosorbent assay, coronavirus (bovine) detection, man 4167.
carbohydrates, analysis, *Streptococcus* group B identification, latex agglutination, immunoprecipitation 1629.
comparison, immunofluorescence, 2-bromovinyl-2'-deoxyuridine, sensitivity, serotyping, herpes simplex virus, methodology 655.
detection, *Chlamydia trachomatis* inclusions, cells, labelling methodology 3337.
detection, cytomegalovirus, clinical isolates, centrifugation, methodology 8437.
electrophoresis, diagnosis, plant diseases, microorganisms, methodology 7921.
enzyme-linked immunosorbent assay, identification, *Escherichia coli*, pili 5067.
immunofluorescence staining, methodology, cytomegalovirus, identification, tissue culture 8441.
herpes simplex virus serotyping 801.
hybridoma, barley yellow dwarf virus, characterization 5892.
hybridoma, production, use, immunodiagnosis, *Legionella pneumophila* 2501.
hybridoma, soybean mosaic virus, lettuce mosaic virus, maize dwarf mosaic virus, use, radioimmunoassay, diagnosis, plant diseases 4998.
immobilization, proteins purification 3429.
immunoassays, SV40, antigen T binding sites, DNA 589.
immunofluorescence sensitivity, *Chlamydia trachomatis* inclusions detection, man 2455.
indirect fluorescent antibody test, herpes simplex virus identification, typing 2429.
potato virus Y, characterization, use, viruses detection 2432.
production, Epstein-Barr virus transformed cells, lymphocytes B, association, *Plasmodium falciparum*, erythrocytes, man, methodology 633.
radioimmunoassay, immunodiagnosis, tuberculosis, man 3351.
selection, adenovirus specificity, immunofluorescence solid phase methods 5885.
use, coupling factor 1 subunits stoichiometry, immunoelectron microscopy, *Escherichia coli* 3479.
use, immunoglobulin M detection, measles virus, rubella virus, immunoassay, man 64.
use, *Legionella pneumophila* serotyping, hybridoma production 2518.
use, poliovirus 1 strains differentiation 619.
- Monographella albescentis,**
scald, fungicides, disease control, *Oryza sativa* 2067.
- Monokaryons,**
dikaryons, recombination, *Typhula incarnata*, infectivity, *Hordeum vulgare* 2788.
Typhula incarnata, morphology, infectivity, phytoxicity, plant diseases 2770.
Uromyces appendiculatus, comparison, dikaryons, virulence, *Phaseolus vulgaris* 2760.

Monolayers,

- fibroblasts, viruses isolation enhancement 4982.
- Monolinia fructicola,**
host-pathogen interactions, in vitro growth, plant cells monosaccharides 7125.
- Monomers,**
best curly top virus, isolation, characterization 3241.
biosynthesis, excretion, bacteria, energy requirements, nutrient requirements, association, mathematical models 8512.
- Monomethyl sulfate,**
biodegradation, industrial wastes, *Hyphomicrobium* 1016.
- Monophenol monooxygenase,**
active sites, copper complex, *Neurospora crassa* comparison *Agaricus bisporus* 5174.
Basidiomycetes, detection methodology 4217.
browning, *Agaricus bisporus*, citric acid effects on 3705.
copper active sites, role tryptophan, fluorescence, *Neurospora* 5173.
extracellular enzymes, production, *Mucor*, *Rhizopus* 7759.
hydroxylation 2,4-dihydroxyphenethylamine, 2,4-dihydroxyphenylalanine, *Basidiomycetes* 890.
isoenzymes activation, pH role, *Aspergillus oryzae* 6041.
tyrosine hydroxylation, role superoxide, *Basidiomycetes* 2594.
wastewater treatment, phenols extraction, *Agaricus bisporus* 5846.
- Monosaccharides,**
effects on exo-1,4- β -D-xylosidase activity, substrate specificity, *Aspergillus niger* 7725.
plant cells, phytopathogenic fungi host-pathogen interactions, in vitro growth 7125.
- Monosodium methaneselenate,**
metabolism, conversion, bacteria 1284.
- Monoterpenes,**
biodegradation, *Pseudomonas incognita* 6957.
- Montane environments,**
grasslands, phosphorus uptake, vesicular-arbuscular mycorrhizas 1260.
- Montia perfoliata,**
potato leaf roll virus, pathogenicity, disease transmission, vectors, *Myzus persicae* 4553.
- Monuments,**
molds, biodegradation, chemical control 1029.
- Moorland,**
land reclamation, population dynamics, soil microorganisms 5633.
- Moraxella,**
biodegradation, 1,4-butanediol polymers 6163.
3 α ,5 α -cyclocholestan-6 β -ol isomerase, purification, characterization 5196.
L-phenylalanine conversion, phenethyl alcohol production, cheese ripening 6993.
radioreistance, dying, effects on 4718.
- Moraxella bovis,**
media (isolation), keratoconjunctivitis, cattle 2452.
- Morchella esculenta,**
biomass, single-cell protein, production, media (culture), peat hydrolysates 6807.
mycelia, liquid culture 7633.
spore germination, saphrophy, soil temperature 386.
- Morganiella morgani,**
identification, AutoMicrob test 1645.
- Morocco,**
Verticillium dahliae, races, pathogenicity, *Lycopersicon esculentum* 9038.
watermelon mosaic virus, plant diseases, *Cucumis sativus*, *Lagenaria siceraria*, host range, disease transmission 6270.
- Morrenia odorata,**
weed control, biological control, use *Phytophthora palmivora*, pathogenicity 2809.
- Mortierella,**
composts, suppression, damping-off, *Rhizoctonia solani*, *Raphanus sativus* 290.
- Mortierella isabellina,**
detoxification, 12-chlorodehydroabietic acid, industrial effluents, pulp mills 2706.
- Mortierella ramanniana,**
dehydrogenase, reduction, bicyclo[3.2.0]hept-2-en-6-one 5255.
- Mortuaries,**
bacteria aerosols, environmental hygiene, ventilation 2415.
- Morus,**
hosts, tobacco ringspot virus, tomato ringspot virus 3818.
- Mosaic disease,**
cucumber mosaic virus, host range, disease transmission, *Cucumis melo* 8819.
disease resistance plant breeding, *Cajanus cajan* 8899.
Prunus avium, *Prunus necrotic ringspot virus*, enzyme-linked immunosorbent assay detection, use, disease control, USA, Washington 3812.
Raphanus sativus, turnip mosaic virus, pathology 8860.
- Mossbauer spectroscopy,**
4-methoxybenzoate monooxygenase (O-demethylating), putidamonoxin active sites, *Pseudomonas putida* 5176.
- Most probable number,**
bacteria enumeration, computer applications 4209.
bacteria, methodology, dilution relationship 1628.
coliforms recovery, membrane filtration, drinking water 6714.
computer applications, indicator species, calculators 5731.
enumeration, *Escherichia coli*, food 3690.
fecal coliforms, pollution monitoring, rivers 1495.
methodology, coliforms enumeration, lakes sediments 9319.
Salmonella, microbial pollution, water analysis 3218.
Staphylococcus aureus 747.
vesicular-arbuscular mycorrhizas, enumeration 2124.
- Mouse hepatitis virus,**
infection, cell culture, indirect fluorescent antibody test, antibodies detection 590.
- Mouthwashes,**
antibacterial activity 6727.
antimicrobial activity, odor control, oral cavity, antimicrobial activity 8432.
chlorhexidine, dental plaque, disease control, surgery, man 2423.
chlorhexidine, dental plaque, man 2425.
chlorhexidine, disease control, dental plaque, mouthwashes 2424.
- Moxilactam,**
antibacterial activity, clinical isolates 5768.
antibacterial activity comparison, cefmenoxime 1388.

Moxalactam, (continued)

- antibacterial activity, Enterobacteriaceae, Haemophilus influenzae, temocillin 5754.
antibacterial activity, Enterobacteriaceae, Staphylococcus aureus 9186.
antibacterial activity, infection treatment, conferences 5949.
antibacterial activity reduction, Bactec test media, Thio broth 6458.
antibacterial activity, reviews 536.
antibacterial activity, role β -lactamase, Enterobacteriaceae 5789.
antibiotic resistance, β -lactamase, membrane permeability, penicillin-binding protein, *Serratia marcescens* 3038.
antibiotic sensitivity testing, Bacteroides 6514.
antibiotic sensitivity testing, Leptospira 1373.
antibiotic sensitivity testing, *Proteus penneri* 9162.
antibiotic sensitivity testing, Streptococcus group D, media effects on 3095.
bibliographies 5771.
inactivation, β -lactamase, bacteria 5770.
+ mezlocillin, antibacterial activity, antibiotic antagonism, antibiotic synergism 7412.
Pseudomonas aeruginosa antibiotic sensitivity testing 1383.
stability, N-methylthiotetrazole side chains 8343.
Streptococcus group B susceptibility 1381.

MS-2 system,

- antibiotic resistance, novobiocin, Staphylococcus epidermidis 434.
antibiotic sensitivity testing, Haemophilus influenzae, ampicillin, cefamandole, chloramphenicol 498.

Mucronate cyclisomerase,

- kinetics, E.S.R., *Pseudomonas putida* 906.

Mucronate cyclisomerase,

- kinetics, *Pseudomonas putida* 908.

Mucopolysaccharidase,

- Bacteroides, purification, characterization 97.

Mung bean,

- antifungal activity, mangostin, derivatives, isolation, *Garcinia mangostana* 4783.
biofortification, leather, museums, Kuwait 1024.
cell culture preservation 5067.
chickens feeds mycoflora, storage conditions effects on 7094.
chymosin, immobilized enzymes, milk curdling 205.
clinical isolates,
1-(4-chlorophenoxyl)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,
chlorophenoxyl-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,
antifungal activity 4756.
detection, oxidase extracellular enzymes 1799.
ethanol, production, fermentation, cellulose, reviews 6107.
extracellular enzymes production 5126.
growth, contamination, taints production, corks, wine 7798.
mangelworm monoxogenesis, extracellular enzymes, production 7759.
mycotoxins, levels, Roquefort cheese, Egypt 7058.
postharvest decay, tomatoes, disease control 5472.
proteinase, amylase activity 8599.
spores, thermal injury, preservatives effects on, germination, growth 1072.

Mucor globosus,

- uric acid biodegradation 4430.

Mucor griseo-cyanus,

- 2-hexadecenal reductase purification 5981.

Mucor miehei,

- antifungal activity, antibiotic B-371, structure-activity relationships 8338.
chitin, metabolism, Streptomyces antibiotics, avermectin, inhibition 6578.
chymosin, thermal stability 79.
milk-clotting enzymes, gel electrophoresis 6876.
milk-clotting enzymes, purification, affinity chromatography 62.
renin, proteolysis, cheese 2741.

Mucor mucedo,

- host-pathogen interactions, in vitro growth, plant cells monosaccharides 7125.

Mucor pusillus,

- malate δ hydrogenase, purification, characterization, comparison, Humicola lanuginosa 8576.
milk-clotting enzymes, gel electrophoresis 6876.
renin, proteolysis, cheese 2741.

Mucor racemosus,

- antibiotics production, morphology association 2255.
growth conditions, meat, food contamination 8193.
milk-clotting enzymes, cheese production 3695.

Mucor rouxii,

- chitosan, biosynthesis, chitin synthetase, chitin deacetylase role 3435.

Mucor stercorarius,

- sodium chloride containing, use, dilution tests, micromethods, antibiotic resistance, Staphylococcus 3012.
use, disc-diffusion test, bacteria 3077.

Mulchee,

- effects on, cucumber mosaic virus, watermelon mosaic virus, incidence, Cucumis sativus 485.

Multienzyme complexes,

- hydrolyase, isoelectric focusing, Trichoderma reesei 8572.

Multiplication,

- tobacco mosaic virus, spreading, Nicotiana tabacum cultivars, aspirin, polyacrylic acid effects on 1441.

Mumps,

- seroepidemiology standardization, enzyme-linked immunosorbent assay methodology, man 7587.

Mumps virus,

- infectivity, titration, immunoperoxidase antiglobulin test 1553.
mumps, seroepidemiology standardization, enzyme-linked immunosorbent assay methodology, man 7587.
propagation, Sephadex carriers, cell culture, Vero cells, embryos, quail 7562.
vaccines, antibody response, enzyme-linked immunosorbent assay comparison neutralization 2436.

Mung bean mild mosaic virus,

- infection, Vigna radiata, Vigna mungo, metabolites concentration 2776.

Mung bean severe mosaic virus,

- infection, Vigna radiata, Vigna mungo, metabolites concentration 2776.

Mung bean yellow mosaic virus,

- infection, Vigna radiata, Vigna mungo, metabolites concentration 2776.

- vectors, Aleyrodidae, insecticides, chemical control, Vigna radiata 2055.

Murceins,

- isolation, Nocardia orientalis, N.M.R., spectroscopy 8805.

- Nocardia orientalis, inhibition, angiotensin-converting enzyme, biological properties, biosynthesis 5959.

Muramic acid,

- levels, soil, bacteria biomass 5614.

Murelin,

- biosyntheses, inhibition, colicin M, antibacterial activity, Escherichia coli 7456.

Murine leukemia virus,

- methylcellulose, media, use, plaque assay 2444.

Musa,

- disease resistance plant breeding, sigatoka, Mycosphaerella fijiensis var. difformis 3870.

Musa paradisiaca,

- crop residues, substrates, single-cell protein production, Pichia spartinae 863.

- Honduras, sigatoka, Mycosphaerella fijiensis var. difformis 8806.

- plant diseases, fungicides, disease control, Mycosphaerella fijiensis 8914.

Musa sapientum,

- leafspot, Drechslera australiensis, symptoms, Egypt, new records 8002.

Musa sapientum,

- plant diseases, fungicides, disease control, Mycosphaerella fijiensis 8914.

Musa textilis,

- disease transmission, abaca mosaic virus, banana mosaic virus, vectors, Aphid gossypii 6276.

- wilt, Pseudomonas solanacearum 7177.

Muscadinia rotundifolia,

- × Vitis vinifera hybrids, cross-breeding, phyloxera resistance 3832.

Museums,

- leather, fungi, biodegradation, Kuwait 1024.

Mushroom poisoning,

- Amanita phalloides, man 2735.

- Cortarius, clinical aspects, kidney, man 1903.

- species identification, man 4454.

Musta,

- acetic acid bacteria, malolactic fermentation, ethanol fermentation 6936.

- Botrytis cinerea, decomposition, L-tartaric acid, L-malic acid, wine, organoleptic evaluation 8668.

- ethanol production, oxygen effects on, yeasts 6122.

- fermentation, pesticide residues, fungicides, protection, Botrytis cinerea 3601.

- fermentation, volatiles production, activators effects on, Botrytis cinerea 3608.

- fermentation, wine production, aroma compounds, organoleptic evaluation, Schizosaccharomyces acidodurans 6933.

- fermentation, wine, temperature effects on, organoleptic properties 1871.

- malolactic fermentation, organoleptic evaluation, wine, Leuconostoc oenos 2692.

Mutagenesis,

- acridine orange, ethanol production, Zymomonas mobilis 5267.

- Bacillus subtilis, proteinase production 6828.

- Bacillus thuringiensis, resistant mutant, U.V. radiation, temperature, use biological control, Insecta 6748.

- disease resistance, Xanthomonas campestris var. oryzae, leaf blight, Oryza sativa 5475.

- ethylmethanesulfonate, methionine over production, single-cell protein, yeasts 5115.

- microorganisms, industrial strains, screening, fermentation, yield 1837.

- N-nitroso-N-methyl-N-nitroguanidine, Propionibacterium, dairy starters, cold temperature-sensitive mutant 2729.

- nitrosoguanidine, genetic engineering, soybean milk flavor compounds, Lactobacillus casei subsp. alactosus 3701.

- nitrosoguanidyl biuret, penicillin biosynthesis, conidia, Penicillium chrysogenum 2268.

- Thermomonas curvata, U.V. radiation, ethylmethanesulfonate, catabolite repression resistant mutant, cellulase biosynthesis 1746.

- U.V. radiation, cellulase production, nutrient requirements, Penicillium funiculosum 8532.

- U.V. radiation, citric acid production, Aspergillus niger 1731.

- U.V. radiation, N-nitroso-N-methyl-N-nitroguanidine, aroma compounds production, dairy starters, Leuconostoc cremoris 1906.

Mutagenicity,

- Ames test, industrial effluents, pulp mills, paper mills, removal, wastewater treatment 4903.

Mutagenicity testing,

- acridine, benzocquinoline, combustion products, phase P22, Salmonella typhimurium 3331.

- aflatoxin B1, Ames test 3738.

- environmental factors, bacteria, phages, books, conferences 3388.

- environmental factors, Escherichia coli, phase λ DNA hybrid 3330.

- Escherichia coli 9306.

- Escherichia coli, role arginine, NAD, valine genes 6775.

- role metabolic activation, Bacillus subtilis rec assay, methodology 3329.

- Trichosporon cutaneum, single-cell protein, mutagenicity testing 1915.

Mutagens,

- Fusarium moniliforme, production 122.

Mutants,

- adenosinetriphosphatase, protons, ATP stoichiometry, N.M.R., membrane potential Escherichia coli 8531.

- amino acids overproduction, transformation, Brevibacterium lactofermentum 5116.

- Aspergillus niger, citric acid production, liquid culture 1708.

- auxotrophs, isolation role clavulanic acid, Bacillus licheniformis 7611.

- cellulase, β -D-glucosidase, production, Alternaria alternata 3463.

- DNA repair, interaction, metronidazole, Escherichia coli 2312.

- endospore, Zea mays, Fusarium moniliforme, infection, effects on, seedlings 3804.

- Escherichia coli, membrane permeability, gene mapping, relationship susceptibility, antibiotics, antibacterial activity 4794.

- exo-1,4- α -D-glucosidase production, catabolite repression, selection, Aspergillus niger 5118.

- flocculation, deoxyribonuclease susceptibility, Pseudomonas 4929.

- herpes simplex virus 1, drug resistance, arabinosyladenine, association, deoxycoryformin 9068.

- herpes simplex virus 1, resistance, phosphonoacetic acid 2193.

- hypersensitivity, antibacterial activity, β -lactam antibiotics, use antibiotic sensitivity testing, bacteria 6496.

- inosine production, ribonucleosides metabolism, Brevibacterium ammoniagenes 5207.

- micrococcin antibiotic resistance, ribosomal protein L11 structure, Bacillus megaterium 6432.

- nikomycin biosynthesis, Streptomyces tendae 4065.

- nitrogenase, iron protein, molybdenum-iron protein, nitrogen fixation, acetylene reduction, Klebsiella pneumoniae 2612.

- nitrogenase, molybdenum-iron protein, recombination, gene expression, E.S.R., Klebsiella pneumoniae 3413.

Mutants, (continued)

Pachysolen tanophyllus, enhancement, growth, ethanol, fermentation, association, xylose 6144.
 papaya ringspot virus, biological control, infection, *Chenopodium quinoa* 8110.
 penicillin N, carabapenems, biosynthesis pathway, *Streptomyces griseus* subsp. *cryophilus* 4837.
 production, cellulase, β -D-glucosidase, *Alternaria alternata* 3453.
 Rhizobium, nitrogen fixation, acetylene reduction, nodulation, *Glycine max* 2989.
 ribitol dehydrogenase biosynthesis, chemostats, *Escherichia coli* 5821.
 Saccharomyces uvarum, fermentation, ethanol, production 7802.
 selection, streptomycin, antibiotic resistance, dairy starters, *Streptococcus* 2730.
 Sporothrix pulverulentum, cellulase, β -D-glucosidase, overproduction, characterization 978.
 Streptomyces ribosidificus, ribostamycin, production 3163.
 Streptomyces spheroides, U.V. radiation induction biosynthesis, extracellular proteinase, fibrinolysis role 8583.
 symbiosis, Rhizobium meliloti, nitrogen fixation, genetic control, Medicago 5676.
 Trichoderma reesei, cellulase, selection, nystatin resistance 60.
 U.V. radiation, cellulose biodegradation, *Aspergillus fumigatus* 2707.

Mutation,

antibiotic resistance, mechanisms, bacteria, reviews 9048.
Aspergillus flavus, nitrosoguanidine, acriflavin, diethylamine, induction, characterization, effects on aflatoxins biosynthesis 7084.
 envelops, enhancement, antibiotics, susceptibility, *Neisseria gonorrhoeae*, clinical isolates 5781.
 furazolidone, *Vibrio cholerae*, streptomycin resistance induction 3993.
 necrosis, role powdery mildew disease resistance, *Hordeum vulgare* 3854.
 rifampicin resistance, Rhizobium japonicum, relationship, symbiosis nitrogen fixation 2962.
 Saccharomyces, strains development, hybridization, methodology 7801.

Mutton

vacuum packaging, films, oxygen permeability, spoilage, organoleptic evaluation 5362.

Mycella,

Agaricus bisporis, growth, carbon sources, *Bacillus subtilis* cell walls biodegradation 6151.
Aspergillus niger, immobilization, glucose oxidase, catalase 1739.
Aspergillus versicolor, post-harvest decay, distribution, *Oryza sativa* 8875.
 cellulase, β -D-glucosidase induction, activity, *Trichoderma reesei* 4298.
 ectomycorrhizas, inoculation, seedlings, *Pinus banksiana* 7227.
 ectomycorrhizas, inoculation, seedlings, *Pinus banksiana* 7228.
 fungi, immobilization, utilization, reviews 8486.
 fungi, penetration, wheat, barley 1080.
 growth, development, fungi, soil 401.
 growth, liquid culture, *Polyporus squamosus* 6790.
 immobilized enzymes methodology, characterization, fermentation applications, *Aspergillus niger* 4408.
 liquid culture, *Morchella esculenta* 7633.
 Macrophomina phaseolina, survival, association, crop residues soil amendment 2133.
 Penicillium commune, bile acids, binding, single-cell protein 7675.
 Penicillium, growth, microbeads, fermenters, penicillin production 2270.
 Phanerochaete chrysosporium, hydrogen peroxide production, fatty acyl-CoA oxidase activity, lignin biodegradation 3476.
 Rhizoctonia bataticola, soil inoculum, Cicer arietinum infection incidence 1976.
 Rhizoctonia solani, soil amendment, biological control, hyperparasitism, Verticillium giguttatum, Gliocladium roseum, Solanum tuberosum 2089.
 sampling, fermenters 9332.
 staining, soil, phytophthora megasperma f.sp. glycinea 8203.
 Trichophyton mentagrophytes, imidazoles sensitivity 1340.

Mycophthora theae

cellulose biodegradation, taxonomy 1889.

Mycena galopus,

competition, Marasmius androsaceus, decomposition, leaf litter, Onychurus latus grazing effects on *Picea sitchensis* 8940.
 vertical distribution, soil, Onychurus latus grazing effects on, forests, *Picea sitchensis* 8939.

Myclozollin,

pesticide resistance, *Sclerotium cepivorum* 5529.

Mycobacterium,

N-acetyl-muramyl-L-alanyl-D-isoglutamine, vaccines development 8388.
 antibacterial activity, 3-(2-carboxyhydrazine)-phenylimino-2-oxinobutane, copper, nickel, chelation 4005.
 antibodies, leprosy, detection, enzyme-linked immunosorbent assay 5057.
 antibodies, leprosy, detection, enzyme-linked immunosorbent assay 5901.
 BCG, vaccines, characterization 8387.
 carboxylic acid derivatives, antibacterial activity 3046.
 cell adhesion kinetics, fouling, reverse osmosis membranes, wastewater treatment 2383.
 clinical isolates, identification, use, gas chromatography 1635.
 drug resistance, antimycobacterial agents, reviews 9061.
 ethambutol analogs, antimycobacterial activity 4720.
 identification, urease activity, Bactec test 692.
 indicator species, pollution control, water reclamation 2394.
 isolation, Bactec test comparison media (culture) 1581.
 laboratories, quality control 3072.
 nephelometry, rifampicin \pm pyrazinamide, antibacterial activity 7354.
 nitrite test reagents 754.
 polysaccharides, biosynthesis, structure 9615.
 proteins, purification, specificity, use, hemagglutination, hemagglutination inhibition 9290.
 Pseudomonas, mixed culture, hydrocarbons oxidation 7312.
 public health, leachates, waste disposal, landfills 3198.
 recovery, radiometry methodology, respiratory tract, man 1860.
 sensitivity, sulfonamides, cotrimoxazole 3045.
 steroid reductase, purification, characterization 5148.

Mycobacterium aurum,

progesterone, 1-dehydroprogesterone, biosynthesis, sterols biodegradation 946.

Mycobacterium avium,

antibacterial activity, norfloxacin, ciprofloxacin 9085.
 detection rates, Bactec test 7583.
 glucose synthetase, purification, characterization 5119.
 susceptibility, heavy metals, salts, anions 3043.

identification, glycolipids, thin-layer chromatography 689.

Mycobacterium bovis,

cytoskeleton, BCG purification 3542.
 identification methodology, use, thin-layer chromatography 5895.
 identification, use, gas chromatography 1635.
 media (transport), sodium borate, comparison, chloramine-T 665.
 viability, staining methodology 8468.

Mycobacterium chelonae,

antibacterial activity, fatty acids 8298.
 antibacterial activity, norfloxacin, ciprofloxacin 9085.
 antibacterial activity, sisomicin, gentamicin, tobramycin 4850.
 bactericidal activity, povidone-iodine 452.
 differentiation, Mycobacterium fortuitum, agar diffusion test, polymyxin, amikacin 1405.
 isolation, lysis \pm centrifugation blood culture 1671.

Mycobacterium flavescens,

ethambutol, inhibition, spermidine synthase 7353.

Mycobacterium fortuitum,

antibacterial activity, fatty acids 8298.
 antibacterial activity, norfloxacin, ciprofloxacin 9085.
 antibacterial activity, sisomicin, gentamicin, tobramycin 4850.
 bactericidal activity, sodium hydroxide 3044.
 biodegradation, heptadecane, hexadecane, gas chromatography 6946.
 detection rates, Bactec test 7583.
 differentiation, Mycobacterium chelonae, agar diffusion test, polymyxin, amikacin 1405.
 drug sensitivity testing, antitubercular agents 4719.
 ethambutol, inhibition, spermidine synthase 7353.
 plasmids, aminoglycoside acetyltransferase, correlation, antibiotic resistance, aminoglycoside antibiotics 7342.

Mycobacterium gastri,

identification, use, gas chromatography 1635.

Mycobacterium intracellulare,

bactericidal activity, sodium hydroxide 3044.

susceptibility, heavy metals, salts, anions 3043.

Mycobacterium kansasii,

antibacterial activity, norfloxacin, ciprofloxacin 9085.
 bactericidal activity, sodium hydroxide 3044.

detection rates, Bactec test 7583.

Mycobacterium lacticum,

oil oxidation 7311.

Mycobacterium lepreae,

ansamycin, antibacterial activity 9066.
 cell culture, macrophages, animals 7585.
 drug sensitivity testing, dapson, rifampicin 4855.
 enumeration 5902.
 glycolipids, oligosaccharides, carbohydrate composition, structure 9244.
 infected Dasypodidae liver, isolation methodology 5903.
 leprosy, detection, fluorescent antibody test, microscopy 5904.
 paratuberculosis drug resistance, dapson, man, reviews 3023.
 staining methodology 7582.
 staining, reviews 3340.
 viability, ATP bioassays, leprosy, man 7584.

Mycobacterium lepraemurium,

cell culture 6785.

Mycobacterium paratuberculosis,

immunoglobulin G reactivity, detection, enzyme-linked immunosorbent assay 3324.
 mycobactin, purification 4394.
 paratuberculosis diagnosis, immunoperoxidase test 3323.
 protofibril peptides, enzyme-linked immunosorbent assay methodology, paratuberculosis diagnosis, cattle 4185.

Mycobacterium phlei,

antibacterial activity, fatty acids 8298.
 growth, metabolism, hydrocarbons utilization 422.
 immobilized cells, steroids production, sterols conversion 4357.

Mycobacterium scrofulaceum,

bactericidal activity, sodium hydroxide 3044.
 identification, use, gas chromatography 1635.

susceptibility, heavy metals, salts, anions 3043.

Mycobacterium smegmatis,

antibacterial activity, fatty acids 8298.
 auxotrophs isolation, use vancomycin, methodology 3348.
 Helianthus annuus, trachyloban-19-oic acid, kaur-16-en-19-oic acid, isolation, antibacterial activity 4009.
 lactate 2-monooxygenase, immobilization, use serum L-lactic acid analysis 7748.

Mycobacterium triale,

biodegradation, heptadecane, hexadecane, gas chromatography 6946.

Mycobacterium tuberculosis,

antibacterial activity, antibiotic DL8280 9084.
 antibacterial activity, antitubercular agents, sulfanilamido-naphthoquinones derivatives, synthesis 5724.
 antibacterial activity, minocycline \pm antitubercular agents 4722.
 antibacterial activity, norfloxacin, ciprofloxacin 9085.
 antibiotic resistance, minocycline DL 8280 7344.
 bactericidal activity, sodium hydroxide 3044.
 cell culture methodology, saliva pretreatment 5897.
 clinical isolates, drug resistance, antitubercular agents, USA, Texas 6422.
 clinical isolates, drug sensitivity testing, drug resistance, antitubercular agents 6443.
 contamination, fiberoptic bronchoscopes, disinfection 3221.
 detection rates, Bactec test 7583.
 disinfection, antitubercular agents 1319.
 drug resistance 4721.
 drug sensitivity testing 1660.
 drug sensitivity testing, drug resistance, antitubercular agents 4717.
 drug sensitivity testing, radiometry 3051.
 extracts, fatty acids biosynthesis 1858.
 identification, acyl type cell walls, use, glycolic acid assays, methodology 9299.
 identification, use, gas chromatography 1635.
 meningitis, cerebrospinal fluid immunoglobulin G measurement, enzyme-linked immunosorbent assay methodology, man 7590.
 niacin extraction methodology 722.
 nicotinic acid, identification methodology 7580.
 proteins, immunoglobulin G, detection, enzyme-linked immunosorbent assay,

Mycobacterium tuberculosis, (continued)

- cerebrospinal fluid, meningitis, man 6773.
- pyrazinamid susceptibility, methodology 1320.
- rifampicin resistance, biological properties 7319.
- tricyclicglycol lipase inhibitors, purification, characterization 4263.
- tuberculin, purification, characterization 1706.
- tuberculosis diagnosis, enzyme-linked immunosorbent assay, man 4200.
- tuberculosis, immunodiagnosis, radioimmunoassay, monoclonal antibodies 3351
- tuberculosis, infection, laboratories, man 2414.
- tuberculosis, man, sputum containers contamination 2417.

Mycobacterium xenopi,

- identification, use, gas chromatography 1635.

Mycobactin,

- purification, *Mycobacterium paratuberculosis* 4394.

Mycoflora,

- chickens feeds, aflatoxins biosynthesis, accumulation, storage conditions effects on 7094.
- Helianthus annuus* seeds, Argentina 7061.
- Oryza sativa* straw, mycotoxins identification 7093.
- soil, relationship *Aphelenchus avenae*, population levels, forests, *Pinus radiata*, crop fields, *Triticum aestivum* 8223.
- Vicia faba* flowers, Egypt 7065.

Mycoplaminan,

- Phytophthora, plasma membranes receptors, stimulation phytoalexins production, Glycine nam 2075.

Mycolic acids,

- biosynthesis, *Nocardia*, antibacterial activity, isoniazid 9096.

Mycophagy,

- Aphelenchus avenae*, population levels, relationship mycoflora, soil, forests, *Pinus radiata*, crop fields, *Triticum aestivum* 8223.

Mycoplasmas,

- animal isolates, mixed infection detection, growth inhibition test 2449.
- antibacterial activity, herbicidin A 9214.
- bushy stunt, vectors host range, *Dabulus longus* 7960.
- colonies, staining, measuring techniques 5893.
- contamination, cell culture, detection, electron microscopy, methodology 3349.
- growth inhibitors, purification, characterization 868.
- identification, counter immunoelectrophoresis methodology, mycoplasmosis immunodiagnosis, cattle 5779.
- infection, *Trifolium repens*, pathogenesis, Canada 2778.
- isolation, identification, media (isolation) comparison 658.
- isolation, semen, cattle, antibiotic sensitivity testing 7473.
- laboratories methodology, books, morphology, ultrastructure, cell culture, identification 3377.
- phytoalexins, pathogenesis, spike, *Santalum album* 8955.
- RNA polymerase (DNA-dependent) isolation 923.
- urogenital tract, media (isolation) 1865.

Mycoplasma canadense,

- isolation, cattle semen 5023.

Mycoplasma columborale,

- chickens animal isolates, antibiotic sensitivity testing, dilution tests, antibiotic resistance 3087.

Mycoplasma gallinearum,

- chickens animal isolates, antibiotic sensitivity testing, dilution tests, antibiotic resistance 3087.

Mycoplasma gallisepticum,

- antigens, yields, pH, effects on 5022.
- culture methodology, glass beads carriers 1571.
- infection, diagnosis, agglutination, methodology, chicks 5078.

Mycoplasma hominis,

- enumeration, methodology 659.

Mycoplasma mycoides,

- miokaryotic antibody activity 8368.

Mycoplasma hyopneumoniae,

- antibodies, detection, enzyme-linked immunosorbent assay comparison, indirect hemagglutination, complement fixation 740.
- pneumonia, pigs, enzyme-linked immunosorbent assay, diagnosis 5894.

Mycoplasma orale,

- collagenase purification, comparison mammalian cells 36.

Mycoplasma pneumoniae,

- antibodies, detection, complement fixation comparison enzyme-linked immunosorbent assay 1863.

Mycoplasma pulmonis,

- antibodies, detection, immunoassays 5021.

Mycoplasma salivarium,

- aminopeptidase, purification, characterization 5996.

Mycoplasma synoviae,

- antigens, yields, pH, effects on 5022.
- chickens animal isolates, antibiotic sensitivity testing, dilution tests, antibiotic resistance 3087.

Mycoplasma-like organisms,

- disease transmission, Cicadellidae, reviews, *Oryza sativa* 7156.
- etiology, little leaf, *Wissadula periplocifolia*, Jamaica, new records 2046.
- infection, *Caladium hortulanum* leaves, electron microscopy 1163.
- infection, leaves, *Eucalyptus* 4617.
- isolation, enzymes digestion, phloem, *Catharanthus roseus* 281.
- little leaf, disease transmission, treatment, *Wissadula periplocifolia*, Jamaica 2047.
- little leaf, *Ipomoea batatas* 6266.
- little leaf, phloem, *Vaccinium vitis-idaea*, *Vaccinium myrtillus* 6275.
- phytiol, *Manihot esculenta*, Colombia 8027.
- phytiol, ultrastructure, lesions, leaves, Leguminosae 8773.
- plant diseases 3771.
- pleomorphism, staining, infection, *Catharanthus roseus* 2816.
- stunt, *Gypsophila paniculata* 3847.
- vectors, Dolphacidae, Cicadellidae, disease transmission 7157.
- western X disease, disease spread, *Prunus virginiana*, *Prunus americana* 2802.

Mycoplasma-like organisms,

- identification, antisera production, standardization 6756.

Mycoplasmosis,

- immunodiagnosis, counter immunoelectrophoresis methodology, *Mycoplasma* identification, cattle 6779.

Mycorrhizas,

- association, *Pseudotsuga menziesii* roots biomass 3945.
- Coniferaleae seedlings, cold storage, ethylene, fungicides, effects on survival

Mycorrhizas, (continued)

- 5581.
 - ecological distribution, Arctic, alpine environments, conferences 2546.
 - effects on, growth, photosynthesis, *Pinus contorta* 5538.
 - Fagus sylvatica*, symbiosis development, ultrastructure 2104.
 - growth, seedlings, *Pseudotsuga menziesii*, *Tuja plicata*, forests litter effects on 5546.
 - host specificity, plants, characterization 8974.
 - inoculation, yield, crops, silviculture 1233.
 - inoculum production, plants response, taxonomy, books 843.
 - interspecific relationships, *Helicotylenchus digonicus* parasitism, roots, *Pinus strobus*, *Pinus excelsa* 348.
 - Melinis minutiflora*, factors affecting 8979.
 - morphology, classification, isolation, media (culture), growth, reviews 4628.
 - nutrient cycles, rain forests, tropical environment 7225.
 - nutrient dynamics, peatlands, reviews 7254.
 - phosphorus, nutrient uptake, plants 5627.
 - Pinus ponderosa*, *Pseudotsuga menziesii*, bifenox, chlorothal, napropamide, effects on, development 5582.
 - plant breeding, biotechnology, books 9339.
 - population levels, primary production, soil, forests 5553.
 - Pozzella ericae*, inhibition meristems development, roots, *Calluna vulgaris* 5560.
 - radioactive labelling, chemicals, association, flux, methodology, reviews 833.
 - research programs, technology, crops 5649.
 - roots, plants, reviews 5647.
 - spore germination, organic acids production, agar, association, autoclaves, effects on 5334.
 - symbiosis, *Arbutus unedo*, ultrastructure *A⁺22*.
 - symbiosis, plants, books 3382.
 - symbiosis, plants, ionizing radiation effects on 8978.
 - trees, books 3381.
 - Tsuga heterophylla*, development, nitrogen, fertilizer applications, effects on 5875.
 - ultrastructure, microscopy, fixation methodology, reviews 834.
- Mycosphaerella filenilis,**
- drug tolerance, benomyl, carbendazim 7325.
 - leaf streak, disease resistance, plant breeding, *Plantago major* 8077.
 - plant diseases, fungicides, disease control, *Musa sapientum*, *Musa paradisica* 89.
- Mycosphaerella filenilis var. difformis,**
- sigatoka, disease resistance, plant breeding, *Musa* 3870.
- Mycosphaerella graminicola,**
- infection, *Triticum aestivum*, factors affecting pathogenesis 7946.
- Mycosphaerella juglandis sp. nov.,**
- leafspot, *Juglans nigra* 7163.
- Mycosphaerella kiliensis,**
- blotch, *Trifolium repens* 8781.
- Mycosphaerella pinodes,**
- infection, phytotoxins isolation, *Pisum sativum* 2781.
- Mycosphaerella sentina,**
- leafspot, disease resistance, *Pyrus amygdaliformis*, *Pyrus communis* 8080.
- Mycotoxins,**
- antibodies association, production, use, detection, food contamination, serum levels, reviews 7082.
 - Aspergillus*, *Fusarium*, *Chaetomium*, food contamination, man, books 6798.
 - Aspergillus ustus* autocystin D, biosynthesis, N.M.R. 5378.
 - association, classification, *Penicillium* 1925.
 - averufin, uncouplers, mitochondria oxidative phosphorylation 4472.
 - barely contamination 1082.
 - biosynthesis, *Alternaria alternata*, water activity, temperature effects on, wheat 5371.
 - biosynthesis, *Fusarium*, reviews 7105.
 - biosynthesis, *Fusarium roseum*, *Fusarium tricinatum*, silage fermentation, *Lolium perenne* 5369.
 - biosynthesis, *Penicillium nigricans*, fermentation methodology 7043.
 - books 5939.
 - contamination, assays, dietary intake safety, man, reviews 7045.
 - contamination, food, detection, thin-layer chromatography 5366.
 - cyclopiazonic acid, production, *Aspergillus tamari* 221.
 - α -cyclopiazonic acid production, *Penicillium*, *Aspergillus* 5370.
 - detection, animals feeds, methodology, use, high-performance liquid chromatography, thin-layer chromatography 7053.
 - detection, *Fusarium ear rot*, *Zea mays* 7083.
 - detection, identification, cheese food contamination, *Penicillium* 7080.
 - detection, media (culture), *Aspergillus*, *Penicillium* 5368.
 - diplosporin, biosynthesis, radioactive labelling, *Diplodia macrospora* 3744.
 - feeds contamination, feeding behavior, chickens 7898.
 - feeds, surveillance, Australia 1074.
 - food contamination, animals feeds, screening methodology, British Isles 7047.
 - food contamination, association cereals grain quality 226.
 - food contamination, cereals food, cereals grain, methodology 225.
 - food contamination, decontamination methodology, reviews 7073.
 - food contamination, feeds contamination, detoxification 7893.
 - food contamination, fermented milk products, risk factors 7106.
 - food contamination, man, animals, screening methodology, reviews 7079.
 - food contamination, mycotoxicosis association, man, animals, books, conferences 7647.
 - food contamination, safety regulations, limitations, reviews 7065.
 - food contamination, screening, prevention, control association food processing, reviews 7070.
 - food contamination, wheat 7098.
 - food contamination, *Zea mays*, intoxication, cattle 6205.
 - fungi, food contamination, books 3384.
 - Fusarium*, biosynthesis, role, plant diseases, reviews 7100.
 - Fusarium*, contamination, food, reviews 7102.
 - Fusarium*, detection, cereals, use, gas chromatography 7077.
 - Fusarium*, detection, physicochemical properties, reviews 7104.
 - Fusarium*, feeding regimes, turkeys, females, reproduction 3720.
 - gas chromatography, food contamination, grain, *Hordeum vulgare* 7107.
 - identification, mycoflora, straw, *Oryza sativa* 7093.
 - levels, Roquefort cheese, Egypt 7058.

Mycotoxins, (continued)

- nuts contamination 3694.
 penitrem A biosynthesis, *Penicillium crustosum* 4471.
 phomopsis A amino acid sequence, N.M.R. use, *Phomopsis leptostromiformis* 3735.
 plant diseases, Fusarium, reviews, books 7649.
 reviews 7063.
 rodnin A, isolation, characterization, *Phomopsis* 7896.
 swainsonine, *Rhizoctonia leguminicola*, contamination, hay, *Trifolium pratense*,
 mycotoxins, horses 8728.
 tissues levels, metabolism, animals, cow's milk, eggs, role transmission, reviews
 7075.

Myrica gale,

actinorrhizas, nitrogen fixation, litter decomposition, nitrogen cycle, peatlands
 8244.

- actinorrhizas, nitrogen fixation, seasonal variations, peatlands 9001.
 nitrogen fixation, actinorrhizas 4608.
 nodulation, *Frankia* 4603.
 nodules, actinorrhizas, hemoglobins levels 4605.
 nodules, *Frankia*, hemoglobin levels, energy metabolism, nitrogenase 2898.
 nodules, *Frankia*, nitrogenase activity, seasonal variations 4607.

Myrothecium roridum,

- antagonism, *Rhizobium* growth, in vitro 7248.
 fruit rot, post-harvest decay 8876.
 infection, *Vigna unguiculata*, leaves amino acid composition 1977.
 leafspot, *Dieffenbachia maculata*, temperature effects on 6255.
 leafspot, *Eichhornia crassipes* 8818.
 new records, new records, trichoverone, 16-hydroxyroridin 1929.

Myrothecium verrucaria,

- biliverdin reductase, purification, characterization 94.
 verrucarol production, in vitro 7895.

Mytilina spearsata,

- pathogenesis, histopathology, biological control, nuclear polyhedrosis virus
 7793.

Myxalamids,

- production, physicochemical properties, antimicrobial activity, *Myxococcus*
xanthus 2291.

Myxobacteriales,

- lysis, *Rhizoctonia solani* hyphae, *Cochliobolus miyabeanus* conidia, soil
 microorganisms, biological control, plant diseases 8920.

Myxococcus fulvus,

- myxopyronin A, biosynthesis pathway 9209.
 myxopyronin A, myxopyronin B, biosynthesis, myxopyronin B 4885.
 myxopyronin, RNA biosynthesis inhibition, antibacterial activity 3130.

Myxococcus virescens,

- myxovirescin A biosynthesis 3126.

Myxococcus xanthus,

- antibiotic M-230B production, isolation, characterization 4062.
 antibiotic TA, adherence, antibacterial activity, characterization 9211.
 antibiotic TA biosynthesis, amino acids precursors 1421.
 myxalamids, production, physicochemical properties, antimicrobial activity 2291.

Myzocetes,

- soil, environmental effects, altitude, USA, Rocky Mountains 387.

Myxopyronin,

- RNA biosynthesis inhibition, antibacterial activity 3130.

Myxopyronin A,

- biosynthesis pathway, *Myxococcus fulvus* 9209.

Myxopyronin B,

- biosynthesis, structure, *Myxococcus fulvus* 4885.

Myxovirescin A,

- Myxococcus virescens*, biosynthesis 3126.

Myzus persicae,

- biological control, benomyl foliar applications effects on, *Verticillium lecanii*
 6091.
 disease transmission, plant diseases, potato virus Y, β -larnesene derivatives
 effects on 5401.
 disease transmission, soybean mosaic virus infection, Glycine max 1973.
 disease transmission, tomato yellow top virus, host range, Solanaceae 7180.
 disease transmission, watermelon mosaic virus, foliar application, oils,
 Cucurbita pepo 6277.
 heredity, potato virus Y, disease transmission, *Datura metel* 3827.
 role, disease transmission, potato virus Y, potato leaf roll virus, *Solanum*
tuberosum 8023.
 vectors, potato leaf roll virus, disease transmission, host range 4553.
 vectors, potato leaf roll virus infection, *Solanum tuberosum*, insecticides,
 disease control 2065.

N.M.R.,

- acid centers, flavodoxin, redox potential, *Megasphaera elsdenii* 7665.
 Aspergillus ustus autocystin D biosynthesis 5378.
 avoparcin, antibacterial activity association conformation 6553.
 azurin, *Pseudomonas aeruginosa* 2564.
 azurin, *Pseudomonas aeruginosa* 6928.
 binding sites, alkaline phosphatase, *Escherichia coli* 2587.
 biosynthesis, insulin A, echinomycin, bacteria 4066.
 carbon-13 distribution, fatty acids, *Cenococcum graniforme*, *Hebeloma*
crustuliniforme 8957.
 chlamydocin+analogs conformation 2305.
 conformation, L-histidine binding histidine-binding protein, *Salmonella*
typhimurium 6811.
 cytoplasmic acid, isolation, *Aspergillus ustus*, characterization 6803.
 cytochrome c 554, *Alcaligenes faecalis* 3439.
 cytochrome c552, *Pseudomonas perfectomarivari* 7710.
 cytochrome c556, *Alcaligenes faecalis* 8520.
 cytochromes redox potential, *Pseudomonas stutzeri* 7713.
 DNA-binding protein multiple forms, *Escherichia coli* 2562.
 ferrocyclochrom c550, ferrocyclochrom c550, *Paracoccus denitrificans* 7701.
 gramicidin A 4057.
 gramicidin A, peptide synthesis 3141.
 hydrogen bonding, toxins, *Helminthosporium carbonum* 7911.
 α -mannans structure, yeasts 8614.
 methanophosphagen, *Methanobacterium thermoautotrophicum*, new records 979.
 phalloidin, thioesters cross-linking, conformation, *Amanita phalloides* 3755.
 phospholipase C active sites, *Bacillus cereus* 5986.

N.M.R., (continued)

- phosphorus 31 metabolism, wastewater treatment, microorganisms 4092.
 polymyxin B 2279.
 protons, ATP stoichiometry, membrane potential, adenosinetriphosphatase, mutants,
Escherichia coli 8531.
 pseudomonic acid, *Pseudomonas fluorescens* 7457.
 pyruvate dehydrogenase (lipamide) complex, domains structure, *Bacillus*
stearothermophilus 3462.
 roseoactin B, *Trichothecium roseum* 8755.
 safracin, physicochemical properties 3659.
 spectroscopy, muracins, isolation, *Nocardia orientalis* 6905.
 streptothricin biosynthesis, arginine radioactive labelling, *Streptomyces* 6569.
 structure, citrinin biosynthesis, *Aspergillus terreus* 6570.
 structure, factor F430, *Methanobacterium thermoautotrophicum* 6071.
 structure, lipiacycin 2284.
 structure, mitomycin C 524.
 structure, saframycin R, interaction, DNA 957.
 structure, streptoviridins, streptomyces griseoflavus, biosynthesis 533.
 thermoplasmaquinone, menaquinone, *Wolinella succinogenes* 6894.
 trichorizianine A1, *Trichoderma harzianum* 1414.
 use, amino acid sequences, mycotoxins, phomopsis A, *Phomopsis leptostromiformis*
 3735.
 vancomycin, biosynthesis, characterization 7463.
 victoximine derivatives, toxins, *Helminthosporium victoriae* 3733.
 virginiamycin, antibiotic A2315a, biosynthesis 532.

N,N'-Dicyclohexylcarbodiimide,

- inhibition adenosinetriphosphatase, *Lactobacillus casei* 2589.

N⁶-(2-Hydroxyethyl) adenosine,

- purification, *Cordyceps*, Isaria, biological activity, calcium antagonists,
 inotropism, guinea-pigs 6060.

NAD,

- blood culture, effects on *Haemophilus influenzae* group 791.
 genes, role, *Escherichia coli* mutagenicity testing 6775.

NAD⁺ kinase

- immobilized enzymes, NADP production, ATP recycling 143.

NADH,

- regeneration, dehydrochloric acid reduction, 12-ketochlorodeoxycholic acid
 synthesis, activity 6090.

NADH dehydrogenase,

- purification, characterization, *Rhodospseudomonas capsulata* 5989.

NADP,

- production, ATP recycling, immobilized enzymes, acetate kinase, NAD⁺ kinase
 143.

NADPH,

- mercuric reductase reaction, kinetics, mechanisms, plasmid pVS1, *Pseudomonas*
aeruginosa 1762.

Nafcillin,

- antibiotic resistance, micromethods, dilution tests, *Staphylococcus*, use sodium
 chloride containing Mueller-Hinton agar 3012.
 antibiotic synergism, rifamycin, antibacterial activity, *Staphylococcus*
epidermidis 8359.
 \pm tobramycin, \pm gentamicin, bactericidal activity, *Staphylococcus aureus*,
 serum assays, treatment, endocarditis, rabbits 478.

Naftifine,

- antifungal activity, ergosterol biosynthesis, *Candida albicans* 5734.
 derivatives, antifungal activity, squalene monooxygenase (2,3-epoxidizing)
 inhibition 8320.

NAD(P)H dehydrogenase (FMN),

- +7 α -hydroxysteroid dehydrogenase + alkanal monooxygenase (FMN-linked),
 immobilized enzymes, determination bile, serum 5131.

Nalidixic acid,

- analogs, antibacterial activity 4735.
 antibacterial activity 6455.
 antibacterial activity, *Chlamydia trachomatis* 3119.
 antibacterial activity, ciprofloxacin comparison 6465.
 antibiotics reaction mechanisms, DNA supercoiling, DNA gyrase inhibition,
Escherichia coli 6560.
 comparison, norfloxacin, antibacterial activity, *Enterobacteriaceae* 7373.
 cross-resistance, *Pseudomonas aeruginosa*, *Escherichia coli* 6421.
 drug resistance, *Escherichia coli*, *Pseudomonas aeruginosa* 4700.
 drug sensitivity testing, *Aeromonas salmonicida* 8303.
 +EDTA-tromethamine, antibacterial activity, gram-positive bacteria 4816.
 treatment, urinary tract infection, bacteria, man 2212.

Naphthalene,

- biodegradation, marine environment isolates, *Penicillium*, yeasts 7310.
 biodegradation, *Micrococcus* 1294.
 biodegradation, plasmids, genetic analysis, reviews, hydrocarbon-degrading
 bacteria 8284.
 biodegradation, reviews 8278.

Naphthoquinone,

- biosynthesis, yeasts, morphology, growth 6563.

Naphtho-pyrene,

- biosynthesis, *Aspergillus niger*, cottonseed contamination isolates 6105.

1,4-Naphthoquinone,

- derivatives, antifungal activity 9103.

Napropamide

- effects on, development, mycorrhizas, *Pinus ponderosa*, *Pseudotsuga menziesii*
 5582.

Narcissus latent virus,

- infection, detection, use, electrophoresis, Iris 8816.

Naopharynx,

- carcinoma, immunodiagnosis, autoradiography, Epstein-Bar virus, immunoglobulin A
 antibodies, man 4992.
 secretions, detection, respiratory syncytial virus, use, immunoperoxidase test,
 man 3234.
 secretions, immunoassays diagnosis adenovirus (human) infection, children 3238.
 secretions, respiratory syncytial virus detection, fluorescent antibody test
 1556.

National parks,

- Iceland, *Rhytisma salicinum* infection, *Salix* 7195.

Natural enemies,

- nuclear polyhedrosis virus, *Tipula iridescent virus*, bacteria, pathogens,
 surveys, use, biological control, *Tipula paludosa* 2662.

Natural killer cells,

- cytotoxicity, stimulation, influenza virus hemagglutinins, use vaccines

Subject Index

Natural killer cells, (continued)

- production 6647.
- Necatorin**,
stability, *Lactarius necator* 7904.
- Neck rot**,
post-harvest decay, *Botrytis allii*, harvesting, drying effects on, onions 8055.

Necrosis

- Lycoposporion esculentum, *Cladosporium fulvum* infection 5465.
- mutation, role powdery mildew disease resistance, *Hordeum vulgare* 3854.
- Pseudomonas corrugata*, immunodiagnosis, enzyme-linked immunosorbent assay, Lycoposporion esculentum 8835.
- roots, *Citrus sinensis*, *Citrus jambhiri*, association, blight, *Fusarium* isolation 1136.
- ultrastructure, disease resistance, *Cronartium quercuum* f.sp.*fusiforme*, fusiform rot, embryos, *Pinus taeda* 362.
- Xanthomonas campestris* pv.*populi*, bark, *Populus* 8171.

Nectria cinnabarina

- Gleditsia triacanthos* var.*inermis* canker, susceptibility, benomyl, disease control 3915.

Nectria coccinea var.fraginata

- host-pathogen interactions, phenols levels, bark, *Fagus grandifolia* 8188.

Nectria haemaphysalis

- DNA, isolation methodology, organelles, plasmids 3365.

Nectria haematococcus

- inoculation, *Sophora japonica* leaves, phytoalexins production 1131.
- phytoalexins tolerance, characterization 426.
- pisatin tolerance, detoxification relationship 431.

Needle blight

- disease resistance, *Pinus ponderosa*, USA 8941.
- Diplastroma septospora*, *Pinus radiata* pathology, Ecuador 5600.

Needlecast

- Phaeocryptopus gaeumannii*, *Pseudotsuga menziesii*, effects on harvesting leaves dehydration, retention 3911.

- Pinus*, biological control, use, *Candida* 2924.

- Pinus sylvestris*, association nutrient dynamics 5601.

- Rhizosphaera oudemansii*, *Abies pinsapo*, pathogenesis 5608.

Negamycin

- precursors, production, dimethyl 3-benzoyloxycarbonylamino-glutaric acid hydrolysis, stereoselectivity, enzymes, *Bacteria* 2308.

Negatives

- 2-acetylpyrimidine, 2-acetylquinoline, 1-acetylquinoline, 3-acetylquinoline, thiosemicarbazones, antibacterial activity 7372.
- ceftriaxone antibacterial activity, agar diffusion test 1392.
- differentiation, *Haemophilus*, micromethods, biochemical analysis 3290.
- identification, methodology, comparison 680.
- oxidation fermentation media, acid production detection 1658.

Nelaea gnomonhoea

- aerobic environments, storage conditions 735.
- antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 6465.

- antibacterial activity, fludalanine + pentazidone 6454.

- antibacterial activity, temocillin 3105.

- antibiotic resistance, specinimycin, characterization 2209.

- antibiotic RU 28965, antibacterial activity 4878.

- antibiotic sensitivity testing 1374.

- antibiotic sensitivity testing 4804.

- antibiotic sensitivity testing, β -lactam antibiotics, aminoglycoside

- antibiotics, inoculum size effects on 7426.

- antibiotic sensitivity testing, sexually-transmitted diseases isolates 5752.

- antibodies detection, radioimmunoassay methodology, man 1586.

- antigens detection, enzyme immunoassay 4180.

- autotyping, serotyping, antibiotic sensitivity testing, gonorrhea epidemiology, man 482.

- clinical isolates, envelopes, mutation, enhancement, antibiotics, susceptibility 5751.

- clinical isolates recovery, media (isolation) comparison 1577.

- colonial characteristics, media (culture), chemical composition 3341.

- detection, genital tract, enzyme-linked immunosorbent assay, methodology, comparison, man 7607.

- detection methodology, β -lactamase production relationship 3286.

- detection, use, agglutination 3300.

- dehydrofolate synthetase, purification, characterization 5183.

- DNA hybridization analysis, use, differential diagnosis, urethritis, non-specific urethritis, man 679.

- drug sensitivity testing, β -lactamase production relationship 1377.

- genitourinary tract gonorrhea, diagnosis, enzyme immunoassay 2481.

- gonorrhea, immunodiagnosis, enzyme immunoassay 2492.

- gonorrhea, Limulus lysate test, diagnosis, females, man 3276.

- identification, catalase detection 691.

- identification, clinical microbiology 887.

- identification methodology, lectins use 5046.

- isolation, identification, quality control, USA 3075.

- isolation, lubricants, effects on, medical instruments, genital tract 697.

- isolation, Transgrow media, use, ammonium bicarbonate, comparison, carbon dioxide 3288.

- β -lactamase, biosynthesis, detection, methodology 30.

- media (culture), methodology 7605.

- media (culture), penicillin resistance, β -lactamase production 718.

- media (isolation) selectivity 5047.

- norfloxacin drug sensitivity testing 9095.

- pili, vaccines, production 539.

- pili, vaccines, production, immunogenicity 538.

- probenecid, antibacterial activity, interaction, benzylpenicillin 6459.

- ribosomes, antibiotics, immunodiagnosis, gonorrhea, man 714.

- tetrahydrofolate dehydrogenase, methotrexate inhibition, kinetics 8579.

- transformation methodology, infection detection, clinical isolates 727.

- urethritis, diagnosis, Limulus lysate test, methodology, man 671.

Neisseria meningitidis

- antibiotic RU 28965, antibacterial activity 4878.

- antibodies, detection, spin probes plasma membranes immunoassays 3325.

- clinical isolates, identification, sodium dodecyl sulfate + polycarylamide gels

- electrophoresis, comparison, typing 2455.

- infection, clinical microbiology, diagnosis, man 5062.

- latex agglutination, detection, antigens, body fluids, man 3310.

- lipopolysaccharides, conjugation *Clostridium tetani* toxoids, antibody response, vaccines, rabbits 1453.

Neisseria meningitidis, (continued)

- lipopolysaccharides, oligosaccharides structure 1832.
- meningitis, diagnosis, cerebrospinal fluid Phadebact test, man 3321.
- meningitis, immunodiagnosis, counter immunoelectrophoresis, agglutination 2488.
- pili, vaccines, production, immunogenicity 538.

Neisseriaceae

- identification methodology, lectins slides agglutination 5042.

Nematoda

- population dynamics, nematophagous fungi parasitism, predation, activated sludge 7537.

Nematodes

- antimicrobial activity, soil microorganisms 1325.

- effects on Actinomyces, distribution, incidence, pasture 7295.

Nematoda

- fungi parasites, nematophagous fungi, soil, Antarctica 8982.

- infestation, culture, fruit bodies production, Basidiomycetes 7854.

- infestation, pest control, fruit bodies production, culture, Basidiomycetes 7855.

- plants pathogens, interaction, endomycorrhizas, reviews 392.

- predator-prey interactions, *Arthrobotrys oligospora*, transmission electron microscopy 2125.

- soil-borne diseases, suppressive soils, biological control 330.

- vectors, plant viruses disease transmission 6217.

Nematophagous fungi

- Arthrobotrys irregularis*, pest control, soil properties, pesticide residues

- effects on, *Meloidogyne* 5218.

- Arthrobotrys oligospora*, predator-prey interactions, Nematoda, transmission electron microscopy 2125.

- isolation, methodology, ecological distribution, soil 5923.

- parasitism, predation, Nematoda population dynamics, activated sludge 7537.

- predator-prey interactions, *Rhizobium*, *Apheleia*, Mexico 2126.

- soil, Antarctica 8982.

- Neo-enactins**,
high-pressure liquid chromatography, physicochemical properties, biological properties, isolation, *Streptovirgillum olivoreticuli* subsp.*neoenactus* 2288.

Neocarcinostatins

- purification, characterization, ion-exchange chromatography, *Streptomyces carzinostaticus* 4374.

Neocampylacryl A

- Streptomyces hygroscopicus* subsp.*crystallogenes* biosynthesis, isolation, characterization, antibacterial activity, antifungal activity 4871.

Neodipion acetate

- larvae, biological control, nuclear polyhedrosis virus 6093.

Neomycin sulfate

- antibacterial activity, antibiotic sensitivity testing 4852.

Neomycin

- antibiotic resistance, animal isolates, mastitis, *Streptococcus agalactiae*, *Staphylococcus aureus*, *Streptococcus* 9083.

- antibiotic resistance, *Staphylococcus aureus*, relationship protein A biosynthesis 9054.

- antibiotic sensitivity testing, gram-negative bacteria, isolation, heart surgery postoperative infection 3107.

- biosynthesis pathways, *Streptomyces fradiae* 4051.

- Escherichia coli* resistant mutant, nitrofurantoin cross-resistance, genetic analysis 9065.

- sterilization, radiation 1378.

Neonates

- baths, washing, relationship, skin microflora, bacteria infection, man 6729.

- man, bacteria microflora antibiotic resistance 7332.

- man, immunoelectron microscopy methodology detection feces viruses, association gastroenteritis 3252.

- man, rotavirus (human) detection, enzyme-linked immunosorbent assay methodology feces 8444.

- pigs, diarrhea, clinical isolates, *Escherichia coli*, antibiotic sensitivity testing 5758.

Neopentins

- structure, *Streptomyces* 4868.

Neoplectana carapaceae

- + *Bacillus thuringiensis* subsp.*kurstaki*, biological control, pest control, *Platyptilia carduidactyla* 5216.

Neopiracyclin I

- synthesis, chemical modification 1449.

Neovossia indica

- bunt, association, loose smut, *Ustilago nuda* var.*tritici*, pathology, *Triticum aestivum* 8799.

- bunt, pathogenesis, *Triticum aestivum* 8801.

- bunt, *Triticum aestivum*, characterization 3808.

- teliospores, isolation, infected *Triticum aestivum*, morphology 7984.

Nephelometry

- lasers, bacteriuria diagnosis, man 5040.

- methodology, yeasts growth measurement, grapes juices 7851.

- rifampicin: pyrazinamide, antibacterial activity, *Mycobacterium* 7354.

Nephrotoxicity

- disease spread, rice tungro virus, *Oryza sativa* 7153.

Nephrotoxicity

- vectors, chemical control, carburetor, phorate, disease control, rice tungro virus, *Oryza sativa* 2072.

- vectors, rice tungro virus, Cicadellidae, carburetor, *Oryza sativa* 6295.

- zodiacs, rice tungro virus, pest control, seeds oils, *Annona squamosa*, *Adzadrachta indica*, *Oryza sativa* 6299.

Nephropathy

- penicillium, viomellein, contamination, *Hordeum vulgare*, pigs 224.

Nephrotic syndrome

- association, hemorrhagic fever, viruses, etiology, immune adherence, immunoassay 3251.

Nerium oleander

- pathogenesis, *Pseudomonas*, *Syringae* pv.*savastanoi* 4558.

Net blotch

- Helminthosporium teres*, yield, *Hordeum vulgare*, Denmark 8782.

- Helminthosporium teres*, disease resistance, genetic variance, plant breeding, *Hordeum vulgare* 316.

- Pyrenophora teres*, barley yellow dwarf virus effects on disease resistance, *Hordeum vulgare* 1196.

- Pyrenophora teres*, cytopathogenicity, *Hordeum vulgare* 1982.

Netherlands

- water treatment, enterovirus, removal, surface water 4953.

- Netilmicin**, agar diffusion test, *Pseudomonas aeruginosa* 4865, antibacterial activity, clinical isolates, *Pseudomonas aeruginosa* 9204, antibacterial activity, *Nocardia* 535, antibiotic sensitivity testing, *Proteus penneri* 9162, \pm ceftazidime, antibacterial activity, gram-negative bacteria 7428, disc-diffusion test, quality control 3073, Enterobacteriaceae sensitivity 6401, immunoassays, serum 530, serum levels, bioassays, *Escherichia coli* 4866.
- Neuraminidase**, cloning, production, vaccines, influenza virus 6598, immobilized enzymes, use agarose, *Arthrobacter* 2580, influenza virus, antibodies detection, enzyme-linked immunosorbent assay methodology 1567, purification, characterization, *Streptococcus mitis* 6005, purification, *Yersinia pseudotuberculosis* subsp.pestis, characterization 8566.
- Neurospora**, catechol oxidase, monophenol monooxygenase, copper active sites, role tryptophan, fluorescence 5173.
- Neurospora crassa**, adenylate cyclase activity, calmodulin activation 7753, alkaline phosphatase, purification, characterization 7696, catechol oxidase, monophenol monooxygenase, active sites, copper complex, comparison *Agaricus bisporus* 5174, colonies filters hybridization methodology 2534, conidia germination, protein biosynthesis 3478, 3'-5'-cyclic-nucleotide phosphodiesterase activity, calmodulin stimulation 2583, DNA, isolation methodology, organelles, plasmids 3365, DNA polymerase, purification, characterization 3477, endo- α -D-xylanase, exo-1,4- β -D-xylosidase, biosynthesis, characterization 6013, extracellular enzymes, proteinase, characterization 6885, nickel resistance, copper toxicity 1312, nitrate reductase, purification, characterization 2591, thymidine-2-oxoglutarate dioxygenase, purification, characterization, electrophoresis, chromatography 5122.
- Neurospora tetrasperma**, DNA, isolation methodology, organelles, plasmids 3365.
- Neurotoxins**, multiple forms, purification, characterization, affinity chromatography, chromatofocusing, clostridium tetani 7908, multiple forms, purification, characterization, antigenicity, comparison, Clostridium botulinum 8213, purification, characterization, amino acid composition, Clostridium botulinum 7909.
- Neutralization**, antibodies detection, avian infectious bronchitis virus, chickens 3245, antibody response, mumps virus vaccines, comparison enzyme-linked immunosorbent assay 2436, cloning, gene expression, vaccines production, herpes simplex virus 6610, Clostridium tetani antitoxins 5383, comparison, enzyme-linked immunosorbent assay methodology, respiratory syncytial virus antibodies 5008, detection, Clostridium tetani antitoxins, serum, man 4488, herpesvirus (equine) 1 detection, serum, horses 606, immunoperoxidase test, detection, antibodies, hog cholera virus, bovine diarrhoea-mucosal disease virus, pigs 6743, methodology comparison, latex agglutination, rubella virus antibodies detection 1540.
- New Zealand**, introduced species, phytopathogenic fungi spores, quarantine 6329, pasture, nitrogen cycle, soil microorganisms activity 7268, pasture, soil microorganisms, biomass, biochemical characteristics 6346, waste water, viruses detection, identification 3219.
- New Zealand black mouse**, cell lines, xenotrans C-type virus detection, use, fluorescence assays chromatophores 620.
- Newcastle disease**, immunity detection, enzyme-linked immunosorbent assay, chickens 3244.
- Newcastle disease virus**, antibodies, detection, enzyme-linked immunosorbent assay, methodology 5017, antiviral activity, tetrahydro-2(1H)-pyrimidinone derivatives, structure-activity relationships 8321, infection, interferon antiviral activity, HeLa cells, mice L cells 1350, L cells, interferon induction, antiviral activity 467.
- Niacin**, Mycobacterium tuberculosis, extraction methodology 722.
- Nicotiana tabacum**, (continued) blue mold, conidia infectivity, overwintering, *Peronospora hyoscyami* 8817, blue mold, *Peronospora tabacina*, metatylax, effects on 8136, callus culture, plant breeding, inheritance disease resistance, *Pseudomonas syringae* tabaci wildfire, *Alternaria alternata* brown spot 317, callus, *Peronospora tabacina*, infection, colonization 4550, cells, leaves cell walls, *Pseudomonas solanacearum* cell adhesion 6282, crown gall, *Agrobacterium tumefaciens*, disease control, salicylic acid, acetyl/salicylic acid 7217, cultivars, tobacco mosaic virus multiplication, spreading, aspirin, polyacrylic acid effects on 1141, detection, identification, tobacco vein mottling virus 6271, disease resistance, damping-off, Philippines 7179, epidemics, black shank, *Phytophthora parasitica* var. *nicotianae* 3630, hypersensitive response, ethylene biosynthesis, infection, tobacco mosaic virus, tobacco necrosis virus 2060, hypersensitive response, role, *Pseudomonas solanacearum* lipopolysaccharides structure 7169, hypersensitive response, tobacco necrosis virus 2057, α -interferon, disease control, infectivity, replication, tobacco mosaic virus 8928, leaves histopathology, tomato mosaic virus 7168, leaves, hypersensitive response, ethylene biosynthesis, tobacco mosaic virus, temperature, light effects on 2061, leaves, hypersensitive response proteins isolation, tobacco mosaic virus infection 7198, leaves, lesions, alfalfa mosaic virus 8857, leaves, mycoflora, isolation, aflatoxins biosynthesis, Iraq 7089, leaves, storage conditions effects on *Aspergillus flavus* aflatoxins biosynthesis 7092, mesophyll protoplasts, tobacco mosaic virus coat protein, mRNA characterization 286, pathogenicity, *Erwinia rubrifaciens*, hypersensitive response 2074, *Peronospora tabacina*, pathogenesis, inculum potential, seasonal variations 4548, petioles, tissue culture, ribavirin antiviral activity, potato virus Y, tobacco mosaic virus, cucumber mosaic virus 3904, plant breeding, cucumber mosaic virus disease resistance, Taiwan 5480, plant diseases, tobacco mosaic virus, inhibitors, antiviral activity 4575, potato virus X, disease control, N-phenyl-N'-aryl thioureas derivatives, structure-activity relationships 4592, powdery mildew, *Erysiphe cichoracearum*, inhibition, foliar applications, *Nicotiana glutinosa* diterpenes 2076, roots tissue culture, *Agrobacterium rhizogenes* transformation, effects on susceptibility, infection, tobacco mosaic virus, potato virus Y 8076, sap, immunodiffusion, detection, cucumber mosaic virus 8822, tobacco leaf curl virus, China, Peoples Rep. 7182, tobacco mosaic virus, disease control, 2-(α -hydroxybenzyl)benzimidazole inhibition RNA biosynthesis 7216, tobacco mosaic virus experimental infection, inoculation methodology 6264, tobacco mosaic virus infection, hypersensitive response, lignification enzymes 7193, tobacco mosaic virus infectivity, *Tritrachium alkaline* proteinase inhibition 2806, wilt, biological control, avirulent strains, bacteriocins production, *Pseudomonas solanacearum* 8113.
- Nicotiana trigonophylla**, powdery mildew, *Leveillula taurica*, incidence, USA, Arizona 8035.
- Nicotine**, biodegradation, fungi 1890, biodegradation, *Pseudomonas putida*, anatomists 6149, stereoisomers, preparation, *Pseudomonas putida* continuous culture 132.
- Nicotinic acid**, identification methodology, *Mycobacterium tuberculosis* 7580.
- Nidula niveo-tomentosa**, biodegradation, lignocelluloses, *Triticum aestivum*, *Acer saccharinum* 6948.
- Nitfurpinol**, drug sensitivity testing, *Aeromonas salmonicida* 8303.
- Nigella sativa**, plant extracts, antifungal activity, aflatoxins biosynthesis, *Aspergillus flavus* 7897.
- Nigeria**, epidemiology, okra mosaic virus, plant diseases, *Abutilon hirtum*, *Sida acuta*, *Malvastrum coromandelianum*, *Physalis angulata* 6262, *Pseudomonas aeruginosa* clinical isolates, antibiotic sensitivity testing 7416.
- Nigrospora oryzae**, symptomless infection, *Zea mays* seeds, role, disease resistance, *Pythium debaryanum* infection 8792.
- Nikkomycin**, biosynthesis, mutants, *Streptomyces tendae* 4065.
- Nilaparvata bakeri**, disease transmission, rice ragged stunt virus, grassy stunt virus, *Oryza sativa* 4520.
- Nilaparvata lugens**, disease transmission, rice ragged stunt virus, grassy stunt virus, *Oryza sativa* 4520, interaction, *Rhizoctonia solani*, sheath blight, *Oryza sativa*, varieties 8789.
- Nirfadeole**, antibacterial activity, *Campylobacter* 4750, comparison, metronidazole, antibacterial activity, *Campylobacter fetus* subsp. *jejuni* 3124.
- Nisin**, antibiotic resistance, *Streptococcus lactis* subsp. *diacetylactis*, plasmid pNP40, dairy starters 2196, biosynthesis, *Streptococcus lactis* plasmid pSN conjugation, sucrose fermentation 3146, effects on, Clostridium botulinum, growth, pork slurries 1924.
- Nitrapyrin**, measuring techniques, nitrification, lakes sediments 8470.
- Nitrate**, ammonium ratio, effects on *Glomus fasciculatum*, phosphorus, nutrient uptake, *Chrysanthemum morifolium* 5642, α -chloric acid, effects on calliforms growth, cheese 7842, effects on chloramphenicol biosynthesis, *Streptomyces venezuelae* 8355, effects on identifying bacteria population levels, continuous culture reactors 660, fertilizer applications, stimulation phosphate, nutrient uptake, ectomycorrhizas,

Nitrate, (continued)

- Pseudotsuga menziesii* 5574.
- nutrient uptake, *Pisolithus tinctorius* inoculation, seedlings, *Quercus rubra* 8935.
- repression, averufin, association, aflatoxins biosynthesis, *Aspergillus parasiticus* 220.
- waste water, chemical analysis, electrodes, immobilized cells 768.
- Nitrate reductase**,
 - assays, peroxidase staining, immunodiffusion, *Escherichia coli* 8559.
 - molybdenum sites, *Escherichia coli* 8554.
 - purification, characterization, *Neurospora crassa* 2591.
 - purification, characterization, *Pseudomonas denitrificans* 6046.
 - purification, characterization, *Rhodospseudomonas palustris* 4318.
- Nitrate reduction**,
 - 3,4-dichloroaniline, biodegradation, *Escherichia coli* 6161.
 - identification methodology, oral cavity isolates 9310.
 - kinetics, nitrate-reducing bacteria 1484.
- Nitrate-reducing bacteria**,
 - nitrate reduction, kinetics 1484.
 - wastewater treatment, slurries, survival, *Escherichia coli*, *Salmonella enteritidis* 6700.
 - starter cultures, meat production 5322.

Nitric oxide

- inhibition, hydrogenase, activity, *Azospirillum brasilense* 8585.
- iron chelating agents, inhibition *Clostridium botulinum* toxins, pork, minced meat 7033.

Nitrocellulose

- Abies balsamea* soil, methanol extracts inhibition, proteins binding effects on, sub-alpine environments 2909.
- Abies balsamea* soil, phenols inhibition, sub-alpine environments 2908.
- acid rain, pollution effects, soil, microorganisms 8245.
- activated sludge 1473.
- activated sludge 2345.
- ammonification, reactors, wastewater treatment 2354.
- bacteria, estuaries, measuring techniques, salinity, effects on 3338.
- colonies, *Eudiptes chrysophilus*, *Aptenodytes patagonicus* 9003.
- herbicides inhibition, soil 9026.
- industrial effluents, wastewater treatment 2373.
- inhibition, aniline, biodegradation, activated sludge 4093.
- inhibition, arsenic, chromium, fluoride, mathematical models 2358.
- inhibitors, 2-chloro-6-(trichloromethyl) pyridine, effects on ammonium levels, soil 7273.
- inhibitors, 2-chloro-6-(trichloromethyl)pyridine, biochemical oxygen demand assays, waste water 1476.
- iprodione effects on, soil, microorganisms 1286.
- lakes, sediments, measuring techniques, nitrapyrin, aliythiurea, nitrifying bacteria 8470.
- mathematical models, rotating discs, wastewater treatment 2355.
- nitrifying bacteria, denitrification, soil 3966.
- nitrifying bacteria, soil, reviews 4654.
- nitrogen cycle, grasslands 5666.
- rain forests, succession, Costa Rica 4612.
- rhizosphere microorganisms, paddy fields, *Oryza sativa* 7284.
- role nitrite, soil pH effects on 5673.
- sea water, nitrifying bacteria, filters, aquaculture 1668.
- soil, chromium(III), chromium(VI), effects on, nitrifying bacteria 9027.
- soil density 5659.
- soil microorganisms, inhibition, herbicides 3969.
- soil microorganisms, soil, adaptations, cold, climatic conditions, Greece 6358.
- urea biodegradation, soils (acid), heterotrophic bacteria 4671.
- urea, granules, sulfur coatings, fertilizers (slow release) 8231.
- wastewater treatment, films, bioreactors 4118.
- wastewater treatment, industrial effluents 8406.
- wastewater treatment, modeling, aeration, supports, reactors 6670.
- wastewater treatment, Nitrobacter, hydrolysis, urea, effects on 6678.

Nitrifying bacteria

- activity, paddy fields 404.
- ammonium levels, nitrification inhibitors effects on, soil 7273.
- immobilized cells+ creatinine deiminase immobilized enzymes, electrodes, creatinine determination 1605.
- inhibition, heavy metals, organic compounds, wastewater treatment 2353.
- isolation methodology, soil, aquatic environment 6774.
- lake sediments, nitrification measuring techniques, nitrapyrin, aliythiurea 8470.
- nitrification, denitrification, soil 3966.
- nitrification, herbicides inhibition, soil 9026.
- nitrification, rhizosphere microorganisms, paddy fields, *Oryza sativa* 7284.
- nitrification, role nitrite, soil pH effects on 5673.
- nitrification, sea water, filters, aquaculture 1668.
- nitrification, soil density 5659.
- nitrification, soil, reviews 4654.
- nitrification, urea, granules, sulfur coatings, fertilizers (slow release) 8231.
- nitrification, wastewater treatment, films, bioreactors 4118.
- nitrification, wastewater treatment, industrial effluents 8406.
- nitrification, wastewater treatment, modeling, aeration, supports, reactors 6670.
- soil nitrification, chromium(III), chromium(VI), effects on 9027.
- soil, nitrous oxide production, phosphate, calcium carbonate, fertilizer applications, effects on 7283.

Nitriase

- acetonitrile biodegradation, *Brevibacterium* 3665.
- activity, nitriles conversion, organic acids production, *Brevibacterium* 3433.
- organic compounds synthesis 4385.

Nitriles

- conversion, organic acids production, *Brevibacterium* 3433.
- conversion, organic acids production, factors affecting amidase, *Brevibacterium* 4271.

Nitrolic acid

- solubility, biodegradability, microorganisms 6158.
- titanium(III), use, *Butyrilobacter methylotrophicum* media 769.

Nitrite

- association, luncheon meat contamination, bacteria growth 2728.
- effects on *Clostridium botulinum* vegetative cells iron-sulfur centers 6203.
- effects on denitrifying bacteria population levels, continuous culture reactors 660.
- inhibition, hydrogenase, activity, *Azospirillum brasilense* 8585.

Nitrite, (continued)

- nitrite reductase (cytochrome) reduction, denitrification, reviews, *Pseudomonas aeruginosa* 7708.
- nitrite reductase (cytochrome) reduction, stoichiometry, nitrous oxide production, *Pseudomonas aeruginosa* 7709.
- soil pH effects on, role nitrification, denitrification 5673.
- waste water, chemical analysis, electrodes, immobilized cells 768.
- Nitrite reductase (cytochrome)**,
 - reduction, nitrite, denitrification, reviews, *Pseudomonas aeruginosa* 7708.
 - reduction, nitrite, stoichiometry, nitrous oxide production, *Pseudomonas aeruginosa* 7709.
- Nitrite test**,
 - reagents, *Mycobacterium* 754.
- 3-(5-Nitro-2-furyl)acrylic acid**,
 - esters, amides, antimicrobial activity 6488.
- β -Nitroacrylate reductase**,
 - purification, characterization, E.S.R., *Clostridium* 3448.
- Nitrobacter**,
 - cryopreservation, use inoculation, wastewater treatment 7600.
 - denitrification, waste water, association, aeration 1478.
 - growth comparison, batch culture, continuous culture, soil isolates 9016.
 - hydrolysis, urea, effects on, nitrification, wastewater treatment 6678.
 - immobilized cells, electrodes, ammonia, nitrogen dioxide 767.
 - nitrification, soil, reviews 4654.
 - role, nitrogen cycle, books 4239.
- Nitrobacter agilis**,
 - cytochrome c oxidase subunits, cytochrome c affinity 5990.
 - glutamine synthetase, purification, characterization 6902.
 - paraquat effects on growth 2176.
- Nitrobenzene**,
 - estuaries, effects on *Escherichia coli*, phenotypes, genotypes 4961.
- Nitrocefin**,
 - antibacterial activity 501.
- Nitrocellulose**,
 - enzyme-linked immunosorbent assay, adenovirus antigens, antibodies 5020.
 - enzyme-linked immunosorbent assay, enterotoxins detection, *Escherichia coli*, *Vibrio cholerae* 4179.
- Nitrococcus**,
 - nitrification, soil, reviews 4654.
- Nitrofurantoin**,
 - +bile acids, antibacterial activity, *Staphylococcus* 7358.
 - cross-resistance, *Escherichia coli* resistant mutant, gentamicin, neomycin, genetic analysis 9065.
 - derivatives, antibacterial activity, *Escherichia coli* 9092.
 - resistance, R factor, *Escherichia coli* clinical isolates 8294.
- 5-Nitrofurantoin**,
 - antimicrobial activity 9141.
- Nitrofurantoin reductase**,
 - nitrofurantoin drug resistance, R factors, *Escherichia coli* 3029.
- Nitrofurantoin**,
 - Clostridium perfringens* drug sensitivity testing 3085.
 - effects on histidine ammonia-lyase induction, *Vibrio cholerae* 3037.
 - drug resistance, nitrofurantoin reductase, R factors, *Escherichia coli* 3029.
 - treatment, urinary tract infection, bacteria, man 2212.
- Nitrofurazone**,
 - drug sensitivity testing, *Bacteroides nodosus* 3056.
- Nitrogen**,
 - anaerobic conditions, photosensitivity, U.V. radiation, *Haemophilus influenzae* 4749.
 - bean common mosaic virus, effects on, *Vigna radiata*, biomass, yield, growth 4511.
 - binding, iron molybdenum sulfur complex, models, nitrogenase 2605.
 - binding, nitrogenase, physicochemical properties 2604.
 - Brucella abortus* immunization effects on, genetic variance, inheritance, Glycine max 5680.
 - chemical analysis, biomass assays, soil microorganisms, soils (organic) 5631.
 - composition, single-cell protein production, yeasts 3728.
 - containing, components, yeasts biomass 1063.
 - containing compounds, disinfection 1512.
 - effects on, fungi, biodegradation, wood, soil 1244.
 - effects on fungi incidence, *Lolium perenne* roots 6340.
 - effects on psychrotrophic bacteria proteinase production, milk contamination 7849.
 - effects on *Rhizobium leguminosarum*, nitrogen fixation, nodules, *Pisum sativum* 2987.
 - effects on rhizoplane microorganisms, bacteria, association, Gramineae 6334.
 - endomycorrhizas interaction, growth, *Lolium perenne* 8971.
 - fertilizer applications, effects on, mycorrhizas, *Tsuga heterophylla*, development 5675.
 - fertilizers effects on *Quercus ectomycorrhizas* 3941.
 - inorganic compounds, effects on, dehydrogenase activity, soil 8988.
 - interaction, soil microorganisms, straw biodegradation, agricultural ecosystems 2659.
 - levels, association, pathogenesis, papaya leaf reduction virus plant diseases, *Carica papaya* 8812.
 - levels, savannahs soil, urea fertilizers, sulfur coatings 8256.
 - levels, soil, soil microorganisms, cellulose biodegradation, tassa 5544.
 - mineralization, association, organic matter, forests soil 8145.
 - mineralization, fertilizer applications, forests, *Pinus radiata* 5541.
 - mineralization, humus, soil pH 5656.
 - mineralization, organic matter, forests soil 7290.
 - mineralization, soil, factors affecting, microorganisms, reviews 4653.
 - nitrous oxide ratio, gas production, denitrification, crop fields, *Hordeum vulgare* 5672.
 - nutrient availability, proteinase production, *Pseudomonas fluorescens* 7749.
 - nutrient concentrations, activated sludge 4083.
 - nutrient cycles, mineralization, soil microorganisms biomass, paddy fields 5632.
 - nutrients removal, phosphorus, wetlands, waste water 1481.
 - Oryza sativa* uptake, Nostoc symbiosis 3958.
 - oxidation, bioreactors, chlorobium thiosulfatophilum, computer applications, monitoring 3612.
 - packaging, spoilage, luncheon meat 8715.
 - packaging, spoilage, psychrotrophic bacteria 5363.
 - recycling, methanogenesis, bioreactors, biomass, *Gracilaria tikvahiae* 8272.
 - removal, role, microorganisms wastewater treatment 3190.
 - riboxine biosynthesis, effects on, *Bacillus subtilis* 1411.
 - soil amendment, soil microorganisms biomass, soil respiration 2931.

Nitrogen, (continued)

- soil diffusion, nitrogen fixation measurements, microorganisms symbiosis, plants 411.
- uptake, *Glomus mosseae*, *Apium graveolens* 1259.
- utilization, hydrocarbons substrates, growth, *Candida guilliermondii* 8289.
- Vitis vinifera* content, relationship, fermentation wine, *Saccharomyces ellipsoideus* 7793.
- yield, *Leguminosae* nodulation, Rhizobium inoculation, Colombia soil types 2158.
- Nitrogen cycle,**
- agricultural land, Denmark, reviews 2984.
- colonies, *Eudypites chrysopholus*, *Aptenodytes patagonicus* 9003.
- denitrification, following, agricultural land, *Triticum aestivum* 2988.
- identifying bacteria, denitrification, soil, reviews 4655.
- fertilizers, soil microorganisms, agricultural ecosystems 5665.
- grasslands 5666.
- litter decomposition, actinorrhizas nitrogen fixation, peatlands, *Myrica gale* 8244.
- litter, humus, *Picea sitchensis* plantations 8167.
- mathematical models, soil microorganisms 3538.
- mathematical models, soil microorganisms, forests 8146.
- measurements, free-living bacteria, *Sorghum* seedlings 8967.
- microorganisms, reviews 8240.
- nutrient dynamics, soil microorganisms, biomass, crop fields, crop production (no-tillage), *Triticum aestivum* 5669.
- Oryza sativa, Azolla pinnae fertilizers 3963.
- Oryza sativa, Azolla pinnae fertilizers 3964.
- Oryza sativa soil, wetlands 3965.
- rhizosphere microorganisms, paddy fields, Oryza sativa, rhizosphere microorganisms 7284.
- role, microorganisms, books 4238.
- sewage sludge fertilizer applications, *Brassica caulorapa* quality 2997.
- soil microorganisms activity, pasture, New Zealand 7288.
- soil microorganisms biomass, estimation, chloroform fumigation 8224.
- soil microorganisms, mathematical models 5636.
- soil microorganisms, seasonal variations, grasslands 5667.
- soil nutrients, Hawaii 7223.
- succession, rain forests, Costa Rica 4612.
- Nitrogen dioxide,**
- effects on, *Bradyrhizobium japonicum*, association, Glycine max, growth 8992.
- electrodes, Nitrobacter, immobilized cells 767.
- Nitrogen fixation,**
- Acacia dealbata* seedlings, nodules, Rhizobium 2906.
- acetylene reduction, ethylene release, soil, peat, Finland 4651.
- acetylene reduction, indicators, ureides levels, Glycine max 2164.
- acetylene reduction, nitrogen-fixing bacteria, soil, litter, forests, *Eucalyptus obliqua*, *Pinus radiata* 8937.
- acetylene reduction, nitrogenase, measuring techniques, nodules, actinorrhizas, *Alnus incana* 8153.
- acetylene reduction, relationship ureides levels, environmental factors, Glycine max 2162.
- acetylene reduction, Rhizobium, varieties, *Vigna unguiculata* 4645.
- actinorrhizas, agroforestry, temperate environments, reviews 2915.
- actinorrhizas, interaction vesicular-arbuscular mycorrhizas, phosphate nutrient uptake, *Hippophae rhamnoides* 8243.
- actinorrhizas, litter decomposition, nitrogen cycle, peatlands, *Myrica gale* 8244.
- actinorrhizas, nodulation, *Datisca cannabina*, *Alnus nitida* 8151.
- actinorrhizas, plantations, silviculture, *Alnus glutinosa*, *Populus nigra* x *Populus trichocarpa* 8156.
- actinorrhizas, tropical environment, *Casuarinaceae*, reviews 2914.
- Aeromonas*, *Alcaligenes*, *Pseudomonas*, isolation, rhizosphere, *Oryza sativa* 5653.
- Alnus incana*, nodulation, Frankia 4610.
- Anabaena torulosa*, comparison, *Plectonema boryanum*, sodium effects on 6381.
- Azospirillum magnetotacticum* 3968.
- Azospirillum brasilense* inoculation, *Sorghum*, *Pennisetum* 5661.
- Azospirillum brasilense*, inoculation, yield, *Pennisetum typhoides* 2963.
- Azospirillum brasilense*, +vesicular-arbuscular mycorrhizas inoculation, yield, *Lotus*, *Lotus*, perenne 1257.
- Azospirillum* inoculation, = fertilizer applications, effects on yield, *Oryza sativa* 1273.
- Azospirillum* inoculation, rhizosphere colonization, yield, *Gramineae* 2968.
- Azotobacter*, *Azospirillum*, leaf litter, *Saccharum officinale* 6353.
- Azotobacter chroococcum*, *Azospirillum brasilense*, inoculation, +fertilizers, yield, *Triticum durum* 7277.
- Azotobacter chroococcum*, isocitrate dehydrogenase activity, strains screening methodology 1637.
- Azotobacter chroococcum*, soil inoculation 4652.
- Azotobacter chroococcum*, +vesicular-arbuscular mycorrhizas, seedlings inoculation, yield, *Lactuca sativa* 6375.
- biochemical characteristics, regulation, nitrogenase, reviews 4656.
- bacteria, *Leguminosae*, interspecific relationships, books 5094.
- biochemical characteristics, genetic control, nitrogen-fixing bacteria, interaction, plants, books 9346.
- biotyping, Frankia, actinorrhizas, relationship nodulation, *Alnus glutinosa* 8157.
- Bradyrhizobium japonicum*, gibberellins, roots levels, Glycine max 8242.
- Bradyrhizobium japonicum*, inhibition nitrogen-15 translocation, leaves, seeds, Glycine max 6370.
- Bradyrhizobium japonicum*, inoculation, herbicides, fungicides seed treatments effects on, Glycine max 8998.
- Bradyrhizobium japonicum* nodulation Glycine max, infection, bean pod mottle virus, soybean mosaic virus, effects on 7140.
- Cicer arietinum, *Rhizobium* nodulation 3960.
- Cicer arietinum, zinc effects on, *Rhizobium* 4650.
- conferences, genetic engineering, nitrogen-fixing bacteria 3395.
- crop fields, soil microorganisms, measuring techniques 1277.
- crops roots, flooded soils 2994.
- crops, soil microorganisms 410.
- Cytopsis tetragonoloba, nitrogenase activity, nodulation, water stress effects on 4670.
- dissolved oxygen effects on, *Azotobacter vinelandii* 3551.
- dissolved oxygen effects on, immobilized cells, *Azotobacter vinelandii* 3550.
- evolution, bacteria, biosphere, paleoenvironments 2171.
- fertilizers, nitrogen sources, nodulation, *Trifolium repens*, *Lotus pedunculatus* 2160.
- Frankia, actinorrhizas, *Alnus*, conferences 5100.
- Frankia, actinorrhizas, *Alnus*, conferences 8499.
- Frankia, actinorrhizas, *Alnus glutinosa* 4593.

Nitrogen fixation, (continued)

- Frankia, actinorrhizas, *Alnus rubra*, *Cytisus scoparius*, nutrient uptake, plantations, silviculture, *Pseudotsuga menziesii* 8159.
- Frankia, *Alnus glutinosa*, *Hippophae rhamnoides*, *Datisca cannabina* 4594.
- Frankia, nitrogenase, actinorrhizas, *Alnus nitida*, *Colletia cruciata*, *Datisca* 2969.
- Frankia, Rhizobium, allelopathy, *Juglans* 3959.
- Frankia, symbiosis, *Alnus nepalensis*, seasonal variations 6320.
- genes, *Klebsiella pneumoniae*, gene expression, *Azotobacter vinelandii* 1280.
- genetic analysis, books 3370.
- genetic analysis, *Rhizobium* 1281.
- Glycine max, *Bradyrhizobium japonicum* strains inoculum nodulation 8247.
- Glycine max, nodulation, *Azotobacter*+fungi+*Rhizobium japonicum* mixed culture effects on 2172.
- Glycine max nodules, acetylene reduction measurement, acetylene concentrations 7293.
- Glycine max nodules, urate oxidase subunits, Rhizobium infection 4668.
- Glycine max, relationship, carbohydrates contents 2992.
- host-pathogen interactions, plants genomes, structure-activity relationships, books, conferences 3391.
- Klebsiella*, foliar applications, yield, crops 2973.
- Klebsiella pneumoniae*, nutrition, wood decay 4423.
- Leguminosae*, symbiosis, interaction, *Rhizobium* 9007.
- Leguminosae*, symbiosis, *Rhizobium* 9005.
- Leguminosae*, symbiosis, *Rhizobium* 9006.
- manure, effects on, soil, *Triticum aestivum*, *Oryza sativa* 6384.
- measurements, *Medicago sativa*, field trials, Sweden 9011.
- measurements, soil diffusion, microorganisms symbiosis, plants 411.
- measuring techniques, nitrogen-fixing bacteria 1603.
- Medicago*, *Rhizobium meliloti*, acetylene reduction 4666.
- Medicago sativa*, leghemoglobin, nodulation, biomass 2961.
- microorganisms, agriculture, crop fields 9345.
- Myrica gale*, actinorrhizas 4508.
- nif gene, gene mapping, gene transfer, fast-growing *Rhizobium*, *Leguminosae*, reviews 2966.
- nitrogen-fixing bacteria, actinorrhizas, seasonal variations, peatlands, *Myrica gale* 9001.
- nitrogen-fixing bacteria, bark, *Bruguiera gymnorhiza* 2098.
- nitrogen-fixing bacteria, fertilizers effects on, soils (podzolic) 8232.
- nitrogen-15, acetylene reduction, hydrogen gas production, environmental chambers, *Leguminosae* 2986.
- nitrogen-15 measurements, *Rhizobium*, *Leguminosae* 7270.
- nitrogen-15, *Rhizobium*, environmental chambers, *Trifolium subterraneum* 2985.
- plant cells, acetylene reduction, oxygen effects on, *Rhizobium bacteroides*, nodules, *Vigna unguiculata*, *Arachis hypogaea* 7291.
- nitrogenase, actinorrhizas, hydroponics, silviculture, nutrient requirements, *Alnus incana* 8152.
- nitrogenase mutants, iron protein, molybdenum-iron protein, *Klebsiella pneumoniae* 2612.
- nitrogenase, oxygen inhibition, nitrogen-fixing bacteria 2610.
- nitrogenase, *Rhizobium*, temperature effects on, *Vigna unguiculata* 2168.
- nitrogenase, structure-activity relationships, nitrogen-fixing bacteria, reviews 2606.
- nitrogenase, substrates reduction, models, *Klebsiella pneumoniae* 2609.
- nitrogenase, Frankia, actinorrhizas, nodulation 8158.
- nodulation, *Rhizobium*, *Parasponia* 2977.
- nodulation, soil moisture effects on, *Medicago sativa* 2165.
- nodules, respirometry, measuring techniques, Glycine max 324.
- optimization, hydrogen uptake, cosmids, *Bradyrhizobium japonicum* 8996.
- Oryza, fertilizer applications 414.
- Oryza sativa 2993.
- Oryza sativa, nitrogen-fixing bacteria 2964.
- Oryza sativa roots, nitrogenase activity, diurnal variation, seasonal variations 5674.
- osmotic stress, inhibition, *Klebsiella pneumoniae*, glycine betaine, enhancement, nitrogenase, biosynthesis 6354.
- Phaseolus vulgaris*, aging effects on, *Rhizobium* 6361.
- Phaseolus vulgaris* cultivars, *Rhizobium leguminosarum* var. *phaseoli* nodulation 9021.
- Phaseolus vulgaris*, phosphorus effects on, *Rhizobium* 7286.
- plant breeding, *Vigna unguiculata* 1271.
- plant cells culture, nitrogen-fixing bacteria 2156.
- plants, measuring techniques, association gases diffusion, plastics 2949.
- plants, symbiosis, actinorrhizas 9009.
- rangelands soil, indigenous species, introduced species, forbs, shrubs, *Leguminosae* 7271.
- regulation, nitrogenase, iron modification, *Rhodospirillum rubrum* 2611.
- relationship, leaf characters, shoots weight, screening genotypes association, *Vigna unguiculata* 9000.
- respiration, *Leguminosae*, nodules, roots, *Rhizobium* 2957.
- Rhizobium*, *Arachis hypogaea*, *Vigna unguiculata*, characterization 9019.
- Rhizobium*, *Azotobacter*, pressmud, use, carriers, characterization 6374.
- Rhizobium*, energy balance, Glycine max 8251.
- Rhizobium*, energy metabolism, electron transport chain, nodules, *Pisum sativum* 2972.
- Rhizobium*, enhancement, growth, association, syntrophism 4661.
- Rhizobium*, hydrogenase activity, *Vigna radiata*, *Vigna unguiculata* 4664.
- Rhizobium*, inoculation, *Vigna sinensis*, *Cicer arietinum* 8999.
- Rhizobium*, inoculum, genetic resources, gene pools, research programs, *Leguminosae* 2965.
- Rhizobium*, interaction, plants, reviews 4659.
- Rhizobium japonicum*, Glycine max fruiting 2154.
- Rhizobium japonicum*, nitrogen-15, levels, nodules, Glycine max 2169.
- Rhizobium japonicum*, soil salinity effects on, Glycine max 2163.
- Rhizobium japonicum*, translocation, vascular system, Glycine max 2956.
- Rhizobium*, *Leguminosae*, plant viruses infection effects on, reviews 8780.
- Rhizobium leguminosarum*, ammonium nitrate effects on 5654.
- Rhizobium leguminosarum*, nodules, factors affecting, *Pisum sativum* 2967.
- Rhizobium leguminosarum*, role indole-3-acetic acid, *Pisum sativum* 2167.
- Rhizobium leguminosarum* var. *phaseoli*, cultivars strains interaction, energy balance, *Phaseolus vulgaris* 8238.
- Rhizobium leguminosarum* var. *phaseoli*, nitrogen sources, cultivars effects on, *Phaseolus vulgaris* 8250.
- Rhizobium leguminosarum* var. *phaseoli*, strains variability, *Phaseolus vulgaris* 8249.
- Rhizobium lupini*, carbon dioxide utilization association, *Lupinus* nodules 9022.

Nitrogen fixation, (continued)

- Rhizobium meliloti, genetic control, symbiosis mutants, Medicago 5676.
 Rhizobium meliloti, glycine betaine effects on sodium chloride tolerance 2159.
 Rhizobium meliloti, plasmids, role, Medicago sativa, gene mapping, reviews 4660.
 Rhizobium meliloti, symbiosis, Medicago sativa, calcium, magnesium effects on 2960.
 Rhizobium meliloti, vesicular-arbuscular mycorrhizas inoculation effects on, Medicago sativa 8221.
 Rhizobium mutants, Glycine max 2999.
 Rhizobium, nitrogen-fixing bacteria, rhizosphere, soil moisture, salinity effects on, crops 2980.
 Rhizobium, nitrogen-15, measuring techniques, crop fields, Glycine max 7289.
 Rhizobium, nodulation, inheritance, plant breeding, Medicago sativa 2979.
 Rhizobium, nodulation, legumes, media (culture), reviews 4657.
 Rhizobium, nodules, genetic analysis, genes, leghemoglobin, nodulin, Leguminosae 2975.
 Rhizobium, symbiosis, Leguminosae, equipment 2955.
 Rhizobium trifolii populations, Trifolium repens symbiosis 409.
 Rhizobium+vesicular-arbuscular mycorrhizas inoculation effects on, Trifolium repens 5628.
 rhizosphere microorganisms, insecticides inhibition, paddy fields 1263.
 role Rhizobium bacteroids, plasma membranes, nodules, Leguminosae 2976.
 soil, Oryza sativa, nitrogen-fixing bacteria 7287.
 soil pH effects on, Rhizobium leguminosarum, nodulation, Lens esculentum 407.
 soil water potential, Azotobacter vinelandii 8237.
 symbiosis, Rhizobium japonicum, relationship, rifampicin resistance mutation 2976.
 Trifolium pratense, Rhizobium symbiosis, white clover mosaic virus infection 7141.
 Trifolium repens, oxygen effects on 2958.
 Trifolium subterraneum, Rhizobium trifolii nodulation, glyphosate soils (loam) applications effects on 2995.
 Vicia faba, books 4236.
 Vigna radiata, environmental stress effects on, symbiosis, Rhizobium 5679.
 Vigna radiata, Rhizobium, soil moisture effects on 4640.
- Nitrogen (liquid),**
 cryopreservation, biochemical characteristics, yeasts 6789.
 cryopreservation, Leptospira 9289.
 cryopreservation, Rhodospirillum rubrum 1615.
 phototrophic bacteria storage, anaerobic conditions 4215.
- Nitrogen sources,**
 ammonium sulfate, nutrient uptake, vesicular-arbuscular mycorrhizas effects on, Sorghum bicolor 8215.
 Aspergillus oryzae, exo-1,4- α -D-glucosidase biosynthesis 4332.
 association, Rhodospirillaceae hydrogen production, use, organic acids 1843.
 bioassays, bacteria, acetylene reduction, effects on 7614.
 cellulase biosynthesis, Trichoderma viride 3508.
 cellulase biosynthesis, Trichoderma viride, effects on 883.
 cultivars, effects on Rhizobium leguminosarum var. phaseoli, nitrogen fixation, Rhodospirillum rubrum 8250.
 effects on biomass production, digestion (anaerobic), methanogenesis, Ulva, Gracilaria tikvahiae 6396.
 effects on polysaccharides biosynthesis, extracellular polymers, Cryptococcus laurentii 5198.
 energy metabolism, activated sludge, statistical analysis 7522.
 nitrogen, nitrogen fixation, nodulation, Trifolium repens, Lotus pedunculatus 2160.
 levans biosynthesis, Bacillus 7764.
 lipids, production, Spachlothea reiliana, Tolyposporium ehrenbergii 1850.
 lipids production, Tolyposporium ehrenbergii, Spachlothea reiliana 5250.
 metabolism, regulation chloramphenicol biosynthesis, Streptomyces venezuelae 4954.
 metabolism, tin antifungal activity, Cunninghamella echinulata, Fusarium oxysporum 1341.
 molasses, ethanol fermentation, biomass production, Saccharomyces cerevisiae 3607.
 nutrient deficiency, models, aerobic conditions, wastewater treatment 1479.
 nutrient requirements, lipids production, Rhodotulula glutinis 1856.
 Penicillium ulmii, patulin production, immobilized cells 2757.
 polysaccharides biosynthesis, effects on, Cryptococcus laurentii 6054.
 Pseudomonas fluorescens growth, cyanide biodegradation, ammonia biosynthesis 1877.
 Psophocarpus tetragonolobus flour, L-lysine production, Corynebacterium glutamicum, Brevibacterium flavum 7670.
 quinoline, biodegradation, kinetics, Pseudomonas aeruginosa 6951.
 translocation, ectomycorrhizas effects on, Pinus taeda 5572.
- Nitrogen-fixing bacteria,**
 activity, bark, Inga, Ilex, Mallotus, Robinia, Cynometra 8147.
 activity, bark, Mallotus japonicus, Ilex pedunculosa, atmospheric pressure, oxygen, effects on 8146.
 Azospirillum brasilense, application, Trifolium aestivum response 3967.
 competition, Beta vulgaris 1278.
 extracellular polysaccharides production 3533.
 genetic engineering, plants, books, conferences 4243.
 identification, Saccharum 5652.
 inoculation, rhizosphere, agroforestry 2910.
 interaction, plants, nitrogen fixation, biochemical characteristics, genetic control, books 9346.
 isolates, soil, water, Egypt, Arab Rep. 4647.
 isolation, soil, characterization 2954.
 nitrogen fixation, acetylene reduction, soil, litter, forests, Eucalyptus obliqua, Pinus radiata 8937.
 nitrogen fixation, agriculture, crop fields 9345.
 nitrogen fixation, fertilizers effects on, soils (podzolic) 8232.
 nitrogen fixation, genetic analysis, books 3370.
 nitrogen fixation, genetic engineering, conferences 3395.
 nitrogen fixation measuring techniques 1603.
 nitrogen fixation, nitrogenase, oxygen inhibition 2610.
 nitrogen fixation, nitrogenase, structure-activity relationships, reviews 2606.
 nitrogen fixation, Oryza sativa 2964.
 nitrogen fixation, plant breeding, Vigna unguiculata 1271.
 nitrogen fixation, plants genomes, structure-activity relationships, books, conferences 3391.
 nitrogen fixation, rhizosphere, soil moisture, salinity effects on, crops 2980.
 nitrogen fixation, seasonal variations, peatlands 9001.
 nitrogen fixation, soil, Oryza sativa 7287.

Nitrogen-fixing bacteria, (continued)

- nitrogenase activity, rhizosphere, environmental factors, pasture 9018.
 nitrogenase activity, rhizosphere isolates, Graminae 9014.
 nitrogenase, substrate specificity, iron molybdenum complex, spectroscopy 2607.
 Oryza sativa rhizosphere microorganisms, isolation, activity, morphology, nutrition 8235.
 Oryza sativa rhizosphere microorganisms, symbiosis, ultrastructure 8236.
 plant breeding, biotechnology, books 8339.
 plant cells culture, nitrogen fixation 2156.
 rhizosphere microorganisms, nitrogenase, vertical distribution, planting density, paddy fields, Oryza sativa 7281.
 rhizosphere microorganisms, plants 5627.
 soil, Trinidad, Tobago 6359.
 symbiosis, Medicago sativa, Glycine max, characterization 1279.
- Nitrogen-15,**
 levels, association, Glycine max biodegradation, soil 2959.
 levels, nodules, Rhizobium japonicum, nitrogen fixation, Glycine max 2169.
 mass spectroscopy, biomass measuring techniques, lignocellulose fermentation, Chaetomium cellulolyticum 5310.
 measurements, nitrogen fixation, Rhizobium, Leguminosae 7270.
 measuring techniques, nitrogen fixation, Rhizobium, crop fields, Glycine max 7289.
 nitrogen fixation, environmental chambers, Leguminosae 2986.
 translocation, leaves, seeds, Bradyrhizobium japonicum nitrogen fixation inhibition, Glycine max 6370.
- Nitrogenase,**
 acetylene reduction, measuring techniques, nodules, actinomycetes, Alnus incana 8153.
 acetylene reduction, oxygen effects on, Rhizobium bacteroids, nodules, Vigna unguiculata, Arachis hypogaea 7291.
 acetylene reduction, seasonal variations, actinomycetes, relationship reductive organic growth, Alnus glutinosa 8155.
 activity, Alnus rubra nodules, Frankia, oxygen effects on 4606.
 activity, carbon dioxide effects on, ribulosebiphosphate carboxylase mediation, Bradyrhizobium japonicum 7280.
 activity, Cymopsis tetragonoloba nitrogen fixation, water stress effects on 4670.
 activity, Frankia, actinomycetes, Alnus incana 4609.
 activity, Frankia, nodules, Myrica glauca, seasonal variations 4607.
 activity measurement, straw decomposition, soil 7292.
 activity, measuring techniques, soil microorganisms, plants 1276.
 activity, nitrogen-fixing bacteria, rhizosphere isolates, Graminae 9014.
 activity, Oryza sativa roots, diurnal variation, seasonal variations 5674.
 activity, Rhizobium, acetylene inhibition, oxygen diffusion, nodules, Leguminosae 8252.
 activity, rhizosphere, nitrogen-fixing bacteria, environmental factors, pasture 9018.
 association, ethylene, production, carbon monoxide, inhibition, soil microorganisms, soil 6357.
 biosynthesis, glycine betaine, enhancement, Klebsiella pneumoniae, osmotic stress, inhibition, nitrogen fixation 6354.
 complex, oxygen inactivation, Azotobacter vinelandii 885.
 Frankia, activity, Alnus rubra roots nodules 6318.
 Frankia, nitrogen fixation, actinomycetes, Alnus nitida, Colletia cruciata, Datiscia 2969.
 iron proteins modification, regulation, nitrogen fixation, Rhodospirillum rubrum 2611.
 iron-sulfur centers levels, ATP binding, Azotobacter vinelandii 2608.
 kinetics, Azotobacter vinelandii, Clostridium pasteurianum, Klebsiella pneumoniae, Azospirillum 19.
 Klebsiella pneumoniae, sodium bisulfite reduction 903.
 methyl isocyanide inhibition, Azotobacter vinelandii 1816.
 models, nitrogen binding, iron molybdenum sulfur complex 2605.
 molybdenum iron proteins, cofactors, C.D., Klebsiella pneumoniae 5141.
 mutants, iron protein, molybdenum-iron protein, nitrogen fixation, acetylene reduction, Klebsiella pneumoniae 2612.
 nitrogen binding, physicochemical properties 2604.
 nitrogen fixation, actinomycetes, hydroponics, silviculture, nutrient requirements, Alnus incana 8152.
 nitrogen fixation, bacteria, biochemical characteristics, regulation, reviews 4656.
 nitrogen fixation, structure-activity relationships, reviews, nitrogen-fixing bacteria 2606.
 nitrogen fixation, substrates reduction, models, Klebsiella pneumoniae 2609.
 nitrogen-fixing bacteria, rhizosphere microorganisms, vertical distribution, planting density, paddy fields, Oryza sativa 7281.
 oxygen inhibition, nitrogen fixation, nitrogen-fixing bacteria 2610.
 recombination, gene expression, E.S.R., mutants, Klebsiella pneumoniae 3413.
 Rhizobium, comparison Frankia, nodules, Parasponia, Myrica glauca 2988.
 Rhizobium, energy balance, Glycine max 8251.
 Rhizobium, temperature effects on, Vigna unguiculata 2168.
 substrate specificity, iron molybdenum complex, spectroscopy, nitrogen-fixing bacteria 2607.
- m-Nitrophenol,**
 biodegradation, Pseudomonas putida 6157.
- o-Nitrophenol,**
 biodegradation, Pseudomonas putida 6157.
- 4-Nitrophenol,**
 hydrolysis enzymes, purification, kinetics, Nocardia 7683.
- 4-Nitrophenol 2-hydroxylase,**
 purification, kinetics, Nocardia 7683.
- p-Nitrophenyl- β -D-glucopyranoside,**
 glycosylation, exo-1,4- β -D-xylase, Aspergillus niger 4349.
- p-Nitrophenyl- β -D-xylopyranoside,**
 glycosylation, exo-1,4- β -D-xylase, Aspergillus niger 4349.
- p-Nitrophenylglycosides,**
 substrates, measuring techniques, α -amylase, bacteria 1794.
- Nitroso-N-methyl-N-nitrogenamide,**
 mutagenesis, aroma compounds production, dairy starters, Leuconostoc cremoris 1906.
 mutagenesis, Propionibacterium, dairy starters, cold temperature-sensitive mutant 2729.
- Nitrosofungin,**
 biosynthesis, isolation, antifungal activity, Alcaligenes-Streptomyces plicatus mixed culture 2297.

Nitrosoquandline,

induction mutation, *Aspergillus flavus*, characterization, effects on aflatoxins biosynthesis 7084.
mutagenesis, genetic engineering, soybean milk flavor compounds, *Lactobacillus casei* subsp. *alactosus* 3701.

N-Nitrosomethyl blue,

mutagenesis, penicillin biosynthesis, conidia, *Penicillium chrysogenum* 2268.

Nitrosomonas,

denitrification, waste water, association, aeration 1466.
immobilized cells, electrodes, ammonia 767.
role, nitrogen cycle, books 4236.
Nitrosomonas europaea,
nitrous oxide, production, soil, pH, temperature, water content, effects on 7274.
paraquat effects on growth 2176.

Nitrospina,

nitrification, soil, reviews 4654.

Nitrothiazole,

derivatives, antibacterial activity 9089.

5-Nitrothiophene aldimine,

derivatives, antimicrobial activity 9141.

Nitrous oxide,

biocoaccumulation, reduction inhibition, *Pseudomonas*, oxygen association 2157.
biosynthesis, denitrification, *In vitro*, *Rhizobium leguminosarum* var. *trifolii* 9020.

levels, soil, soil microorganisms, factors affecting 1274.

nitrogen ratio, gas production, denitrification, crop fields, *Hordeum vulgare* 5572.

Nitrosomonas europaea, production, soil, pH, temperature, water content, effects on 7274.

production, nitrite reductase (cytochrome) reduction nitrite, stoichiometry, *Pseudomonas aeruginosa* 7709.

production, soil microorganisms, denitrification, soil thawing 7285.

production, soil, nitrifying bacteria, phosphate, calcium carbonate, fertilizer applications, effects on 7263.

Nitrovin,

antibacterial activity, Clostridium, agar dilution test, animal isolates 3050.

Nitroverol,

Fusarium, detection, grain, Egypt 7069.

Fusarium graminearum, food, food contamination, flour, *Hordeum vulgare* 2737.

gas chromatography, levels, food contamination, grain, *Hordeum vulgare* 7107.

Nocardia

alicyclic ring biodegradation, reviews 8277.

biodegradation, aromatic compounds + halogens, mechanisms, reviews 7826.

distribution, incidence, pasture, nematodes effects on 7295.

lignin biodegradation, reviews 7823.

Nocardia methanearsonate, metabolism, conversion 1284.

mycolic acids biosynthesis, antibacterial activity, isoniazid 9098.

netilmicin antibacterial activity 535.

4-nitrophenol 2-hydroxylase, purification, kinetics 7683.

Nocardia amarae,

induction emulsification reversal, water-in-oil emulsions 1878.

Nocardia asteroides,

antibiotic synergism, imipenem, amikacin, cotrimoxazole, cefotaxime 480.

drug sensitivity testing 3090.

netilmicin antibacterial activity 535.

Nocardia coralina,

fermentation, 19-norsteroids intermediates, sterols, *Glycine* max 1823.

immobilized cells, propylene oxide production 418.

substituted aromatic compounds, induction, catechol 1,2-dioxygenase, catechol 2,3-dioxygenase 912.

Nocardia erythropolis,

α -D-mannosidase production 914.

Nocardia farcinica,

netilmicin antibacterial activity 535.

Nocardia fructiferi var. atomycin,

pigments, biosynthesis, isolation, factors affecting 1857.

Nocardia mediterranea,

methylmalonyl-CoA decarboxylase, isolation, characterization 8607.

Nocardia opaca,

fermentation enzymes comparison, *Alcaligenes*, *Xanthobacter autotrophicus* 150.

Nocardia orientalis,

muracins, inhibition, angiotensin-converting enzyme, biological properties, biosynthesis 5599.

muracins, isolation, N.M.R., spectroscopy 6805.

Nocardia oltidis-cavium,

netilmicin antibacterial activity 535.

Nocardia paraffinicum,

metabolism, biodegradation, isobutane, propane, oxygenase activity 8275.

Nocardia rhodochrous,

cholesterol oxidase, cholesterol conversion, cholestenone 108.

immobilized cells, steroids production, use solvents 3525.

Nocardia sulphurea,

cetocyclic, biosynthesis, characterization 2247.

Nocardicin,

synthesis 6587.

Nocardicin A,

+L-alanyl-L-1-aminomethylphosphonic acid, antibiotic synergism, antibacterial activity, *Pseudomonas aeruginosa* 6554.

effects on, *Pseudomonas aeruginosa*, *Escherichia coli*, morphology, scanning electron microscopy 9216.

interaction, *Bacillus megaterium* penicillin-binding protein, elongation inhibition 1397.

synthesis 6586.

Nocardiolopsis,

biodegradation, TCDD 2713.

isolation, identification, composts 8198.

Noctulidae,

biological control, pathogens, isolation, culture, *Entomophthora gammae* 6088.

Noctulium,

actinorrhizas, *Alnus nitida*, *Datisca cannabina* 8151.

Aeschynomene indica stems, *Rhizobium* physiology characterization 2155.

Alnus glutinosa plantlets, *Frankia* 4601.

Alnus rubra, *Frankia* + *Pseudomonas* *capacia* 4600.

Bradyrhizobium japonicum, gibberellins, roots levels, *Glycine* max 8242.

Nodulation, (continued)

Bradyrhizobium japonicum, *Glycine* max, interspecific relationships, regulation 8997.

Bradyrhizobium japonicum, infection, light inhibition, cotyledons, *Glycine* max 8248.

Bradyrhizobium japonicum, inoculation, herbicides, fungicides seed treatments effects on, *Glycine* max 8938.

Bradyrhizobium japonicum, penicillin sensitivity, *Glycine* max roots 5655.

Bradyrhizobium japonicum, seeds inoculation, planting, *Glycine* max 6352.

Bradyrhizobium japonicum, *Glycine* max 6379.

Cicer arietinum, zinc effects on, *Rhizobium* 4650.

competition, *Rhizobium leguminosarum*, *Rhizobium japonicum*, *Pisum sativum*, *Glycine* max 2967.

Cyamopsis tetragonoloba nitrogen fixation, water stress effects on 4670.

Frankia, actinorrhizas, *Alnus rubra*, root hairs 4599.

Frankia, actinorrhizas, biotyping, *Alnus nitida* 8158.

Frankia, actinorrhizas, inoculation, agroforestry, *Casuarina* 8149.

Frankia, actinorrhizas, inoculation, propagation, seedlings, *Alnus crispa* 8154.

Frankia, *Alnus incana*, nitrogen fixation 4810.

genetic analysis, nutrient flow, *Rhizobium*, *Leguminosae* 2974.

Glycine max, *Bradyrhizobium japonicum*, nitrogen fixation, infection, bean pod mottle virus, soybean mosaic virus, effects on 7140.

Glycine max, *Bradyrhizobium japonicum*, relationship, rhizosphere, response 4641.

Glycine max, *Bradyrhizobium japonicum* strains inoculation, nitrogen fixation, seeds protein composition 8247.

Glycine max, inoculation, *Rhizobium* 6371.

Glycine max, nitrogen fixation, *Azotobacter* + fungi + *Rhizobium japonicum* mixed culture effects on 2172.

Glycine max, *Rhizobium japonicum* inoculation 2122.

Glycine max, *Rhizobium japonicum* strains competition 408.

Glycine max, *Rhizoctonia solani*, m-hydroxyphenylacetic acid, m-methoxyphenylacetic acid, effects on 1119.

Glycine soja, cloning DNA sequence, effects on root hairs, *Bradyrhizobium japonicum*, *Pseudomonas putida* 6365.

inhibition, allelopathy, *Parthenium hysterophorus*, *Indigofera tinctoria* 8987.

Leguminosae, nitrogen yield, *Rhizobium* inoculation, *Columbia* soil types 2158.

Leucaena leucocephala, inoculation, *Rhizobium* 6373.

Leucaena leucocephala, *Rhizobium* strains competition, tropical environment soil 7267.

Macrozamia communis seedlings, symbionts 2907.

Medicago sativa, nitrogen fixation, leghemoglobin, biomass 2961.

Medicago sativa, *Rhizobium* inoculation 5663.

Myrica gale, *Frankia* 4603.

nitrogen fixation, fertilizers, nitrogen sources, *Trifolium repens*, *Lotus pedunculatus* 2160.

nitrogen fixation, soil moisture effects on, *Medicago sativa* 2165.

Phaseolus vulgaris, inoculation, *Rhizobium leguminosarum* var. *phaseoli* 6376.

relationship biotyping, *Frankia*, actinorrhizas, *Alnus glutinosa* 8157.

Rhizobium, *Cicer arietinum* 3960.

Rhizobium inoculation, fertilizer applications effects on, *Vigna unguiculata* 2963.

Rhizobium inoculation, seed treatments, carbofuran, *Glycine* max 2990.

Rhizobium inoculum, soil, *Phaseolus vulgaris* 2161.

Rhizobium japonicum, inoculation, dose-response effects, roots age, *Glycine* max 2166.

Rhizobium japonicum inoculation, *Glycine* max 2952.

Rhizobium, legumes, nitrogen fixation, media (culture), reviews 4657.

Rhizobium, *Leguminosae*, Malaysia 8164.

Rhizobium, *Leguminosae*, plant viruses infection effects on, reviews 8187.

Rhizobium leguminosarum, role indole-3-acetic acid, *Pisum sativum* 2160.

Rhizobium leguminosarum var. *phaseoli*, *Phaseolus vulgaris*, *Pseudomonas putida* effects on 5658.

Rhizobium leguminosarum var. *phaseoli*, *Phaseolus vulgaris* cultivars, nitrogen fixation 9021.

Rhizobium leguminosarum var. *trifolii*, aluminum toxicity, soils (acid), *trifolium repens* 7279.

Rhizobium leguminosarum var. *trifolii*, inhibition, metals oxides, *Trifolium* 7294.

Rhizobium leguminosarum var. *trifolii*, inoculation, soil chemistry, soil pH effects on 7278.

Rhizobium leguminosarum var. *trifolii*, inoculum, phages effects on 5662.

Rhizobium leguminosarum var. *trifolii* strains competition, inoculation, *Trifolium repens* 3962.

Rhizobium leguminosarum var. *trifolii*, *Trifolium subterraneum*, *Glomus fasciculatum*, *Glomus mosseae*, effects on 5615.

Rhizobium meliloti, plasmids, role, *Medicago sativa*, gene mapping, reviews 4660.

Rhizobium meliloti, strains, cell surface, *Medicago sativa*, agglutinins 5651.

Rhizobium mutants, *Glycine* max 2989.

Rhizobium, nitrogen fixation, inheritance, plant breeding, *Medicago sativa* 2979.

Rhizobium, nitrogen fixation, *Parasponia* 2977.

Rhizobium, nitrogen fixation, soil moisture, salinity effects on, *Leguminosae* 2980.

Rhizobium, nod gene, gene mapping, genes, nitrogen fixation, reviews, *Leguminosae* 2966.

Rhizobium, role nodulin gene expression, *Pisum sativum* 2981.

Rhizobium, soil amendment, calcium oxide, calcium sulfate effects on, *Cicer arietinum*, *Lens esculenta* 9015.

Rhizobium soil isolates, soil temperature tolerance, desiccation, tropical environment, *Vigna unguiculata* 8241.

Rhizobium, symbiosis, *Leguminosae*, equipment 2955.

Rhizobium trifolii, *Trifolium repens*, temperature effects on 1282.

Rhizobium, *Vigna radiata* 6360.

Rhizobium, *vigna radiata*, efficiency correlation antibiotic resistance 4662.

Rhizobium, *Xylaria torresana*, *Gaibouria conjugata*, *Pholiostigma thorningtonii* 4667.

Rhizobium + vesicular-arbuscular mycorrhizas inoculation effects on, *Trifolium repens* 5628.

root hairs infection, role *Rhizobium japonicum*, capsules polysaccharides, *Glycine* max 2970.

soil pH effects on, *Rhizobium leguminosarum*, nitrogen fixation, *Lens esculentum* 407.

stems, *Rhizobium*, *Aeschynomene* 9010.

Trifolium subterraneum, *Rhizobium trifolii*, glyphosate soils (loam) applications effects on 2995.

Vigna unguiculata, *Rhizobium*, soil acidity effects on 8993.

Nodulites,

actinorrhizas, *Casuarina cunninghamiana*, *Myrica gale*, hemoglobins levels 4605.

Alnus glutinosa, actinorrhizas, abscisic acid localization 346.

Nodules, (continued)

- Alnus glutinosa, actinorrhizas, factors affecting dormancy 347.
 Alnus rubra, Frankia, oxygen effects on nitrogenase activity 4606.
 Alnus rubra roots, Frankia nitrogenase activity 6318.
 Bradyrhizobium japonicum bacteroids, denitrification pathway, in vitro, Glycine max 8995.
 Bradyrhizobium, Vigna unguiculata 6364.
 Casuarina, Frankia isolation 4597.
 formation, Agrobacterium tumefaciens, Escherichia coli, Ti plasmid vectors, Rhizobium meliloti nod gene, gene expression 6366.
 Frankia DNA, isolation, purification, Alnus glutinosa 4370.
 Glycine max, Bradyrhizobium japonicum 6362.
 Glycine max, nitrogen fixation, acetylene reduction measurement, acetylene concentrations 7293.
 Glycine max, nitrogen fixation, urate oxidase subunits, Rhizobium infection 4668.
 Glycine max, symbiosis, Bradyrhizobium japonicum, α -D-galactosidase, α -D-glucosidase 6363.
 hemoglobin levels, energy metabolism, nitrogenase, Rhizobium, comparison Frankia, Parasponia, Myrica gale 2898.
 Leguminosae, respiration, nitrogen fixation, Rhizobium 2957.
 Lupinus, Rhizobium lupini isolation, carbon dioxide utilization association nitrogen fixation 9022.
 morphology, actinorrhizas, Datisca cannabina, Alnus nitida, 8151.
 Myrica gale, Frankia, nitrogenase activity, seasonal variations 4607.
 nitrogen fixation, Glycine max, respirometry, measuring techniques 324.
 nitrogen-15 levels, nitrogen fixation, Rhizobium japonicum, Glycine max 2169.
 nitrogenase, acetylene reduction, measuring techniques, actinorrhizas, Alnus incana 8153.
 oxygen diffusion, Rhizobium, nitrogenase activity, acetylene inhibition, Leguminosae 8252.
 Pisum sativum, glutamine synthase cross-reactivity, Rhizobium leguminosarum 3956.
 proteins, Pisum sativum roots, Rhizobium leguminosarum interaction 4844.
 respiration, nitrogenase, Rhizobium, energy balance, Glycine max 8251.
 Rhizobium, Acacia dealbata seedlings, nitrogen fixation 2906.
 Rhizobium bacteroids, plasma membranes, role nitrogen fixation, Leguminosae 2976.
 Rhizobium leguminosarum, nitrogen fixation, factors affecting, Pisum sativum 2987.
 Rhizobium, nitrogen fixation, energy metabolism, electron transport chain, Pisum sativum 2972.
 Rhizobium, nitrogen fixation, leghemoglobin, nodulin, genes, genetic analysis, Leguminosae 2978.
 Rhizobium, Streptomyces inhibition, rhizosphere, Vigna mungo 6378.
 Rhizobium, Trifolium repens, Medicago sativa, survival, association, calcium oxide pelleting 2950.
 Rhizobium, ureides biosynthesis pathways, Leguminosae 2971.
 Sesbania rostrata, calluses, Rhizobium infection, pathogenesis 3798.
 Trifolium subterraneum, Rhizobium trifolii populations, soil acidity effects on 405.
 ultrastructure, Frankia, actinorrhizas, Dryas drummondii, Rubus ellipticus 8150.
- Nodulin,**
 gene expression, role nodulation, Rhizobium, Pisum sativum 2981.
 genes, genetic analysis, Rhizobium, nitrogen fixation, nodules, Leguminosae 2978.
- Noise,**
 filters, computer applications, batch culture, ethanol production, computer applications, yeasts 3630.
- Nomilin,**
 conversion obacounine, bitter principle removal, Corynebacterium fascians, immobilized cells, fruit juices, Citrus 7773.
- Nomuraea rileyi,**
 epizootiology, use biological control, Platyphena scabra, Anticarsia gemmatilis, Pseudoplusia includens 5214.
 pathogens, virulence, conidia, biological control, Trichoplasia ni 6900.
 virulence, temperature, dosage effects on, Anticarsia gemmatilis 5212.
- Non-A, non-B hepatitis,**
 blood transfusion, disease transmission, identification, radioimmunoassay, methodology, man 646.
 enzyme-linked immunosorbent assay 6748.
- Non-fermentative gram-negative bacteria,**
 clinical isolates, identification, Oxim Form tube test comparison N/F system 683.
- Non-specific urethritis,**
 differential diagnosis, urethritis, use, Neisseria gonorrhoeae DNA hybridization analysis, man 679.
- Nonactin,**
 intermediates, macrolide antibiotics biosynthesis, Streptomyces griseus 6575.
- Non-target organisms,**
 baculovirus, pathogenicity, infectivity, biological control, Palaeomonetes vulgaris 6921.
 granulosis virus biological control effects on, orchards, Cydia pomonella 4387.
 Pythium ultimum, Trichoderma viride, pesticides (organochlorine) toxicity, synergism 4659.
 pathogens, herbicides, toxicity, herbicides, insecticides, fungicides 2082.
 soil microorganisms, toxicity, pesticides 5680.
- Nopaline dehydrogenase,**
 activity, Agrobacterium tumefaciens, crown gall, plants 6274.
- 2'-Nor-2'-deoxyguanosine,**
 antiviral activity comparison, 9-(2-hydroxyethoxymethyl)guanine, DNA polymerase inhibition, herpes simplex virus 1349.
- Norfloxacin,**
 antibacterial activity 6455.
 antibacterial activity, Chlamydia trachomatis 3119.
 antibacterial activity, ciprofloxacin comparison 6465.
 antibacterial activity, Ligonella 5726.
 antibacterial activity, Mycobacterium 9085.
 antibacterial activity, Pseudomonas aeruginosa, Enterobacteriaceae 9100.
 antibacterial activity, Pseudomonas aeruginosa, Serratia marcescens, clinical isolates 4752.
 antibacterial activity reduction, Bactec test media, Thiol broth 6458.
 antibacterial activity, urinary tract bacteria, factors affecting drug resistance 6465.
 antibacterial activity, urinary tract isolates, antibacterial agents comparison 6453.
 comparison, nalidixic acid, cinoxacin, oxolinic acid, antibacterial activity, Enterobacteriaceae 7373.
 cross-resistance, Pseudomonas aeruginosa, Escherichia coli 6421.
 disc-diffusion test, bacteria, standardization, quality control 3047.
 drug resistance, Escherichia coli, Pseudomonas aeruginosa 4700.

Norfloracin, (continued)

- drug sensitivity testing, gram-negative bacteria, gram-positive bacteria 9095.
- Nornicotine,**
 production, association, nicotine biodegradation, fungi 1890.
- 19-Norsteroids,**
 intermediates, Nocardia coralina, fermentation, sterols, Glycine max 1823.
- North America,**
 Cajanus cajan diseases, crop production, economic importance 7139.
 plant viruses, Rubus idaeus 6256.
 Puccinia graminis f.sp.secalis races, distribution, virulence, Secale cereale 265.
- Northernlamycin,**
 structure, Streptomyces cattleya 1427.
- Norway,**
 clinical microbiology laboratories, antibiotic sensitivity testing quality control 4040.
 Picea abies, defensive mechanisms, Ips typographus, mixed infection, Ceratocystis 1237.
- Noisococcal environments,**
 air conditioning, microorganisms, enumeration, methodology 5863.
 bacteria, clinical isolates, antibiotic resistance 3994.
 contamination, Clostridium difficile 2412.
 floors, cleaning systems, disinfection, bacteria 7544.
 laminar air flow, asepsis, leukemia, man 572.
 laminar air flow, infection prophylaxis immunocompromised hosts 570.
 laminar air flow, infection prophylaxis, malignancy, children 576.
 laminar air flow, infection prophylaxis, man 573.
 laminar air flow, man, leukemia 575.
 laminar air flow, man, leukemia, infection prophylaxis 577.
 laminar air flow, microwave radiation, sterilization, food, man 574.
 medicine containers, pathogens contamination 1503.
 microbiocidal activity, ozone 2411.
 pharmaceuticals, contamination, microorganisms, reviews 9149.
- Noisococcal infection,**
 Achromobacter xylosoxidans isolates, fatty acid composition, antibiotic sensitivity testing 4789.
 bacteria, epidemiology, carpets, hospitals, man 581.
 disease control, epidemiology, hospitals, environmental hygiene 1521.
- Noistec,**
 symbiosis, Oryza sativa nitrogen uptake 3958.
- Nothofagus dombeii,**
 forests, species composition, fungi, soils, Argentina 3906.
 blue stain, Ceratocystis, isolates, characterization 5598.
- Noisurmycin,**
 isolation, antimicrobial activity, Streptomyces noursei 2307.
- Novoblocin,**
 antibiotic resistance, genes, cloning, Streptomyces 1314.
 biosynthesis ratio, proteinase, Streptomyces spheroides 6573.
 derivatives, Actinomyces hydroxylation 5792.
 fungi biosynthesis 2254.
 resistance, Staphylococcus identification methodology, media (culture) 1318.
 resistance, Staphylococcus saprophyticus identification 4692.
 role, plasmid pMG110 elimination, Escherichia coli 5797.
 Staphylococcus aureus susceptibility, agar media 1422.
 Staphylococcus epidermidis, antibiotic resistance, MS-2 system 434.
 sterilization, radiation 1378.
- Noxthiolin,**
 formaldehyde release mechanisms, antibacterial activity 2216.
- Nuarmol,**
 effects on, Ustilago avena spores ultrastructure 2889.
- Nuclear division,**
 meliosis, Tularemia araneosa, fluorescence stains, microscopy 9330.
- Nuclear Overhauser effect,**
 acyl carrier protein secondary structure, tertiary structure, Escherichia coli 1.
- Nuclear polyhedrosis virus,**
 biological control, histopathology, pathogenesis, Mythimna separata 7791.
 biological control, insecta, environmental factors 2671.
 biological control, larvae, Neodiprion sertifer 6093.
 biological control, Spodoptera littoralis 3571.
 epidemiology, detection methodology, enzyme-linked immunosorbent assay, Lymantria dispar 7561.
 infection susceptibility, biological control, Heliothis sublexa, Heliothis zea 2657.
 integrated control, pesticides, Heliothis armigera 977.
 isolation, virulence, use biological control, Cadra figulella 6904.
 mortality, dose-response effects, mathematical models, bioassays, biological control, Trichoplasia ni, Heliothis zea, Spodoptera frugiperda 6901.
 mortality, Heliothis armigera larvae, bioassays, use biological control 967.
 pathogens, biological control, pests, experimental infection, mammalian cells, mammalia 6895.
 pathogens, biological control, Rachiplosia nu, Rachiplosia ou 2659.
 pathogens, natural enemies, surveys, use, biological control, Tipula paludosa 2662.
 +pesticides, integrated control, Heliothis virescens 135.
 replication, epidermis cell culture, inoculum production, biological control, epidoptera 3249.
 virulence, biological control, susceptibility, larvae, Heliothis zea, Heliothis virescens, Heliothis armigera 6903.
- Nuclear power plants,**
 tritiated water, wastewater treatment, hydrogenase, immobilized cells, Alcaligenes eutrophus 554.
- Nuclease,**
 assays, identification, Staphylococcus aureus 3353.
 purification, characterization, Bacillus subtilis 5996.
- Nucleation,**
 ice, bacteria, plants 3781.
- Nuclei,**
 Cochliobolus heterostrophus DNA, isolation methodology 3365.
 fungi, fluorescence staining 5936.
 Lycopersicon esculentum leaves, potato spindle tuber viroid infection, site location 3819.
- Nucleic acids,**
 antibacterial agents effects on, bacteria 9094.
 antiviral activity, nucleosides analogs, herpes simplex virus 8328.
 biosynthesis, Escherichia coli, cyanocycline A inhibition, antibacterial activity

Nucleic acids, (continued)

1430.
 biosynthesis, inhibition, primordia formation, *Coprinus congregatus*, cell culture methodology 2527.
 concentration, *Vigna radiata*, plant viruses infection 2776.
 hybridization analysis, enterovirus detection, coxsackievirus B3 DNA use 4979.
 inhibition, antibiotics antibacterial activity 3174.
 interaction, benzodifuran derivatives antiviral activity 6483.
 pretreatment, cell culture, effects on herpes simplex virus 1 reproduction 463.

Nucleocapsids,

antigens, pseudorabies virus, use, skin tests, pigs 617.

Nucleosidediphosphate kinase,

purification, quaternary structure, mechanism, *Escherichia coli* 7700.

Nucleosides,

analogs, antiviral activity, herpes simplex virus nucleic acids 8328.

analogs, antiviral activity, reviews 9130.

analogs, effects on, cytomegalovirus (human), replication 4022.

Nucleotide sequence,

ADP-ribosyl transferase, biosynthesis, comparison, *Escherichia coli*, *Vibrio*

cholerae 7120.

alcohol dehydrogenase Acl1 gene mutation, barley stripe mosaic virus, infection, *Zea mays* 7152.

cleavage, endonuclease, *Acetobacter acetii* subsp. *xylinum* 3501.

genes, toxins, amino acid sequence, *Corynebacterium diphtheriae* 7119.

Vibrio cholerae toxins genes, deletion mutant analysis, vaccines development 2327.

Nucleotides,

antiviral activity, vesicular stomatitis virus, replication, HeLa cells 8334.

fermentation, manganese, deficiency, effects on, *Brevibacterium ammoniagenes*,

Micrococcus luteus, DNA biosynthesis, precursors 951.

Numerical,

metabolites, characterization, 7-formylmellein, 5-formylmellein 5246.

Nutrient availability,

biodegradation, industrial wastes, ash, land disposal, soil microorganisms 8257.

phytic acid, phosphorus, single-cell protein, *Saccharomyces cerevisiae* effects on, feeding trials, rats 7883.

proteinase production, *Pseudomonas fluorescens* 7749.

survival, starvation, soil isolates, clinical isolates, bacteria, fresh water, lakes 9224.

Torulopsis utilis, single-cell protein, juveniles, cattle 1921.

Nutrient balance,

activated sludge, role, bacteria flocculation, extracellular polymers production,

settling 2334.

Nutrient concentrations, batch culture, association, fermentation, cellulose, *Clostridium thermoacellum*

4443.

glucose, carbon sources, aeration, 2,3-butanediol production, *Klebsiella*

pneumoniae 3547.

nitrogen, activated sludge 4083.

penicillin G biosynthesis, immobilized cells, carrageenans supports, *Penicillium*

chrysogenum 4048.

Nutrient cycles,

forest floor, taiga, USA, Alaska 5545.

iron, microorganisms, reviews 8208.

mineralization, soil microorganisms biomass, paddy fields 5632.

mineralization, soil microorganisms, fallow land, crop production (no-tillage),

crop fields, *Triticum aestivum* 5668.

mycorrhizas, rain forests, tropical environment 7225.

nutrient dynamics, soil microorganisms, organic matter, crop fields 5637.

soil, microorganisms, books 4238.

silicon, microorganisms, reviews 8207.

soil microorganisms, agricultural ecosystems, reviews 5630.

soil microorganisms decomposition, straw, *Hordeum vulgare* 5683.

soil microorganisms, leaf litter decomposition, plantations, *Coffea arabica* 5624.

soil microorganisms, litter, forest floor, burning effects on, *Pinus ponderosa*

forests 8932.

soil, microorganisms, reviews 8206.

sulfur, soil microorganisms, forests 4611.

zinc, manganese, cobalt, biomass levels, soil microorganisms 6347.

Nutrient deficiency,

glucose, growth, mathematical models, computer applications, *Escherichia coli*

4173.

nitrogen sources, models, wastewater treatment, aerobic conditions 1479.

ribitol, chemotaxis, ribitol dehydrogenase, *Escherichia coli* 3444.

Nutrient dynamics,

nitrogen cycle, soil microorganisms, biomass, nutrient dynamics, crop production

(no-tillage), *Triticum aestivum* 5669.

nutrient cycles, soil microorganisms, organic matter, crop fields 5637.

Pinus sylvestris, association plant diseases 5601.

savannahs, tropical environment, soil microorganisms 2941.

soil microorganisms, environment management, pasture 8963.

Nutrient flow,

Rhizobium, nodulation, nutrient flow infection, genetic analysis, *Leguminosae*

2974.

Nutrient loading,

wastewater treatment, conferences 2549.

Nutrient loss,

litter biodegradation, winter, *Picea mariana*, *Betula glandulosa*, *Cladonia*

stellaris, sub-polar environments 3907.

Nutrient requirements,

Alternaria porri, purple blotch, *Allium cepa* 2037.

amino acids, proteins, bacitracin biosynthesis, *Bacillus licheniformis* 1403.

α -amylase production, *Bacillus apiiari* 7758.

antibiotics biosynthesis, optimization, *Streptomyces galbus* 4875.

Bacillus, carbon sources, endospores formation, soil 4619.

bacteria, association, monomers biosynthesis, excretion, mathematical models

8512.

biotin, growth factors, cell culture, reviews, yeasts 7787.

biotin, lysine production, *Brevibacterium lactofermentum* 6817.

carbon sources, hydrocarbons, L-lysine production, *Arctobacter globiformis* 4265.

cellulase production, U.V. radiation, mutagenesis, *Penicillium funiculosum* 8532.

Cladosporeum resinae, biodegradation, contamination, fuels 1306.

copper, growth, methylotrophic bacteria 8476.

ectomycorrhizas, reviews 829.

elements, *Aspergillus*, aflatoxins biosynthesis 7068.

fermentation, high-gravity wort, ethanol production, *Saccharomyces uvarum* 8667.

Nutrient requirements, (continued)

hydroponics, silviculture, actinomycetes, nitrogen fixation, *Alnus incana* 8152.

inoculum production, biological control, spore crystals, *Bacillus thuringiensis*

subsp. *galeries* 7601.

manganese, patulin biosynthesis, media (culture), *Penicillium urticae* 5796.

media (culture), amino acids, vitamins, *Bacillus thuringiensis* subsp. *galeries*

7603.

media (culture), *Spiroplasma*, methodology 1570.

moleses fermentation, citric acid production, *Aspergillus niger* 8514.

nitrogen sources, carbon sources, lipids production, *Rhodotorula glutinis* 1856.

oxalic acid, acetic acid, ozonation, wastewater treatment, *Spirillum* 4121.

potassium, ethanol utilization, single-cell protein production, *Torulopsis*

ethanolitolerans 3409.

urea, sodium phosphate, industrial effluents distilleries, *Bacillus* 5818.

Vicia faba leaf rust, pathogenesis, urediniospores, *Uromyces viciae-fabae* 5408.

Nutrient sources,

Aspergillus aflatoxins biosynthesis, mycelia growth 7074.

phytoplankton, ponds, composting, solid wastes, sewage sludge 6689.

Sphagnum, hydrolysates, *Scytalidium acidophilum*, single-cell protein, production

7879.

whey, lipids production, *Aspergillus nidulans*, *Penicillium frequentans*, *Fusarium*

lycopersicum 7788.

Nutrient transport,

ectomycorrhizas, roots, *Pinus sylvestris* 5573.

Nutrient uptake,

amns, vesicular-arbuscular mycorrhizas stimulation, *triticum aestivum*, *Hordeum*

vulgare 5623.

Chromobacterium lividum, acephate, effects on 6460.

hydrocarbons, *Acinetobacter calcoaceticus*, role extracellular cell membranes,

particles 7308.

nitrogen sources, ammonium sulfate, vesicular-arbuscular mycorrhizas effects on,

phosphate, ectomycorrhizas, fertilizer applications stimulation, *Pseudotsuga*

menziesii 5574.

phosphate, ectomycorrhizas, phosphatase, comparison, *Basidiomycetes* saprophytes,

Betula pubescens, *Pinus contorta* 5575.

phosphate, vesicular-arbuscular mycorrhizas, colonization, roots, crops 5620.

phosphate, vesicular-arbuscular mycorrhizas, interaction actinomycetes nitrogen

fixation, *Hippophae rhamnoides* 8243.

phosphate, vesicular-arbuscular mycorrhizas, physiology, colonization, roots,

trees 5554.

phosphate, vesicular-arbuscular mycorrhizas, spores levels, soils (sandy), yield,

Anacardium occidentale 7260.

phosphorus, *Glomus fasciculatum*, pH, ammonium nitrate ratio effects on,

Chrysanthemum morifolium 5642.

phosphorus, nitrate, *Pisolithus tinctorius* inoculation, seedlings, *Quercus rubra*

8935.

phosphorus, nitrogen fixation, *Rhizobium meliloti*, vesicular-arbuscular

mycorrhizas inoculation effects on, *Medicago sativa* 8221.

phosphorus, vesicular-arbuscular mycorrhizas, *Citrus* 8216.

rhizosphere microorganisms, mycorrhizas, plants 5627.

stimulation, ectomycorrhizas inoculation, seedlings, greenhouses, *Pinus* 5567.

stimulation, vesicular-arbuscular mycorrhizas, *Arachis hypogaea* 5641.

vesicular-arbuscular mycorrhizas, forests, tropical environment 5576.

vesicular-arbuscular mycorrhizas inoculation, growth, *Hordeum vulgare*, *Zea mays*,

Pisum sativum 7257.

vesicular-arbuscular mycorrhizas, inoculum density, *Trifolium repens* 8214.

vesicular-arbuscular mycorrhizas, soil aeration effects on, *Eupatorium odoratum*,

Sorghum bicolor, *Guizotia abyssinica* 1256.

Zea mays+*Azospirillum brasilense* nitrogen fixation, inoculation, yield, *Zea mays*,

Lolium perenne 1257.

Nutrient utilization,

Rhodotorula glutinis, association, lipids production 970.

Nutrients,

manganese, microorganisms, reviews 8209.

media, tobramycin biosynthesis, *Streptomyces cremus* subsp. *tobramycini* 2313.

microorganisms, removal, waste water 3202.

removal, nitrogen, phosphorus, wetlands, waste water 1481.

substrates effects on *Colletotrichum gloeosporioides* latent infection, *Persea*

grattissima fruits 7987.

Nutrition,

Klebsiella pneumoniae, wood decay 4423.

nitrogen-fixing bacteria, isolation, *Oryza sativa* rhizoplane microorganisms 8235.

Vigna unguiculata, effects on disease resistance, tobacco necrosis virus,

sun-herm mosaic virus 312.

Vigna unguiculata seedlings, effects on mixed infection pathogenesis, *Fusarium*

oxysporum+sun-herm mosaic virus 6234.

Nutritional status,

breast milk heat treatments, microorganisms contamination, immune status,

infants, man 7038.

Nutritive value,

abattoirs, activated sludge, industrial effluents, chickens 7015.

Basidiomycetes, characterization 8700.

Candida, single-cell protein, feeding trials, chickens 5361.

manure, digestion (aerobic), feeds, chickens 6201.

minerals, meals, soybeans+corn, fermentation effects on, lactic acid bacteria

5355.

Paeclomyces varioti, feeds, chickens 7103.

proteins, aflatoxins food contamination effects on, chickens 5352.

single-cell protein, conferences 2544.

single-cell protein, feeds 1914.

single-cell protein, fermentation, milk, ultrafiltration, pigs 1916.

Nuts,

Areca catechu, incidence, patulin, India 7087.

food contamination, aflatoxins, chemical analyses, extraction, thin-layer

chromatography 7108.

mycotoxins contamination 3694.

Prunus amygdalis, food contamination, *Aspergillus flavus* aflatoxins levels 7101.

Nypa fruitcans,

sap, fermentation, vinegar production, *Acetobacter acetii* 6999.

Nystatin,

afatoxin B1 production, effects on, *Aspergillus parasiticus* 3745.

antibiotic resistance, inhibition active transport, *Candida tropicalis* 5716.

dye sensitivity testing, *Candida* 5735.

resistance, *Trichoderma reesei*, mutants selection, cellulase yield 60.

- Obacuneone**, normin conversion, bitter principle removal, *Corynebacterium fascians*, immobilized cells, fruit juices, *Citrus* 7773.
- Occupational exposure**, industries, safety regulations, legislation, enzymes 45.
- Occupational hazards**, laboratories, bacteria manipulation, safety instruments 5872. laboratories, pathogens, disease transmission, disease control 1522.
- Ocean dumping**, sewage sludge, indicator species, marine pollution 2389.
- Ochratoxin A**, antibodies association, production, use, detection, food contamination, serum, levels, reviews 7082. biosynthesis, *Aspergillus ochraceus*, biomass, growth, temperature effects on 2758. contamination, *Triticum aestivum* by-products, detection, high-performance liquid chromatography 5367. detection, animals feeds, methodology, use, high-performance liquid chromatography, thin-layer chromatography 7053. food contamination, reviews 7060. identification, *Penicillium* food contamination cheese 7090. identification, *Aspergillus* ingestion animal feeds, Yugoslavia 7048. production, barley contamination, *Aspergillus ochraceus*, *Penicillium viridicatum* 5375. thin-layer chromatography detection, olive oil 1931.
- Ochratoxin A2**, food contamination, man, animals, screening methodology, reviews 7079.
- Ocimum basilicum**, essential oils, antifungal activity, in vitro 9105.
- Ocuma**, biodegradation, algae: *Acinetobacter calcoaceticus* 2191.
- Ocotopina**, biosynthesis detection, *Nicotiana rustica*, *Agrobacterium tumefaciens* crown gall 2908.
- Ocylisparomycin**, structure-activity relationships 6584.
- Odontoglossum ringspot virus**, Cydymidium mosaic virus, Cydymidium, infection, cytopathology 3823.
- Odor compounds**, actinomycetes, absorption, off flavor, fishponds, *Actinurus punctatus* 3211. actinomycetes, chemical composition, water quality 2648. volatiles, actinomycetes, taste, water quality 2649.
- Odor control**, air pollution, trickling filters, use, microorganisms 3200. oral cavity, mouthwashes, antimicrobial activity, man 8432.
- Odor intensity**, microbial pollution, fungi, actinomycetes, relationship pH, oxygen, reservoirs 3212.
- Odor perception**, identification, bacteria 9287.
- Odors**, actinomycetes, water quality, conferences 3387. association volatiles biosynthesis, *Plautus eusomus* 133. gases, wastewater treatment, deodorization, industries 9248. industrial pollution, deodorization, use, peat 9232. sewage sludge, deodorization, chemicals treatment 9247. wastewater treatment, aerobic conditions, animal wastes, pigs 2378. lyscasse, use, yeasts RNA, DNA, isolation methodology 8492.
- Off flavor**, odor compounds absorption, actinomycetes, pond culture, *Actinurus punctatus* 3211. organoleptic evaluation, spoilage, coliforms, shelf life, milk 4448. Streptomyces, *Aspergillus*, *Penicillium*, corks contamination, wine 1870.
- Oflaxacin**, antibacterial activity 4735. antibacterial activity comparison, tetracycline, *Chlamydia trachomatis* 9199.
- Ofurace**, controlled-release granules, use, disease control, *Solanum tuberosum* late blight, *Phytophthora infestans* 2887.
- Oidiodendron griseum**, mycorrhizas, *Vaccinium*, characterization 1262.
- Oidiodendron truncatum**, clercidin characterization 5801.
- Oidium begoniae**, powdery mildew etiology, *Begonia socotrana* 5464.
- Oidium begoniae var. macrosporum**, powdery mildew etiology, *Begonia socotrana* 5464.
- Oil**, association, carbazoles, biodegradation, bacteria 4684. association, railway tracks, stimulation, biodegradation, field trials, fungi, bacteria 1305. bacteria biodegradation, sea water, continuous culture 1893. bacteria, fungi, biodegradation, fouling organisms 1697. biodegradation, bacteria, sampling, enumeration, reviews 4437. biodegradation, dispersants, effects on, bacteria 1303. biodegradation, marine environment isolates, *Penicillium*, yeasts 7310. contamination, sulfate-reducing bacteria 6665. microorganisms biodegradation, books 1683. oxidation, *Pseudomonas liquefaciens*, *Pseudomonas desmoltitum*, *Pseudomonas aeruginosa*, *Mycobacterium lacticum* 7311. pasteurization, antimicrobial activity, mathematical models, bacteria, biodegradation 1297. recovery, bacteria, enhancement, reviews 3004. recovery enhancement, bacteria transport properties, sandstone, apparatus methodology 423. recovery, enhancement, use, microorganisms, methodology 8270. recovery, reservoirs, shales, reviews, hydrocarbon-degrading bacteria 8286. recovery, use, microorganisms, methodology 8266. samples, bacteria survival 9040. shales, microorganisms, role, solubilization, laboratory methods 9029. yeasts, use, microorganisms growth association, kinetics mathematical models 2530.
- Oil and gas industry**, effluents, effects on microorganisms, biodegradation, USA, Wyoming rivers 9038.
- Oil and gas industry, (continued)** industrial effluents, wastewater treatment, reviews 8403. industrial wastes, waste treatment, land disposal, biodegradation, soil microorganisms 2178. pipes corrosion, sulfate-reducing bacteria, reviews 8411. sludges, land disposal, biodegradation, soil microorganisms 4919. sulfate-reducing bacteria, biodegradation, equipment, contamination, oil 6665. tar + sand combustion wastewater treatment, organic compounds, microorganisms oxidation 3194. use, biocides, antibacterial activity, sulfate-reducing bacteria 1299. wastewater treatment, enzymes, microorganisms 180. wastewater treatment, hydrocarbons, industrial effluents, biodegradation, *Pseudomonas aeruginosa*, Egypt 2190. wastewater treatment, reviews, bibliographies 4916.
- Oil cake**, effects on, *Phytophthora parasitica* var. *paripera*, growth, pathogenesis, *Areca catechu* 8138. extracts, Glycine max, media (culture), *Saccharomyces cerevisiae* 8485. fungi biodegradation, proteins production 871. soil amendment, disease control, root rot, *Triticum aestivum* 8088.
- Oil dispersants**, biodegradation, aquatic bacteria, sea water 1876.
- Oil installations**, waste water, sewage microflora, hydrocarbons biodegradation 2374.
- Oil pollution**, estuaries, water chemistry, population levels, hydrocarbon-degrading bacteria 6399.
- Oil spilla**, biodegradation, bacteria, characterization 1302. marine environment, biodegradation, enzymes, microorganisms 180.
- Oils**, emulsions, parvovirus (porcine) vaccines production, pigs 7487. extraction, oilseed crops, enzymes, microorganisms 54. foliar application, disease transmission, watermelon mosaic virus, *Cucurbita pepo*, *Myzus persicae* 6277. *Gossypium hirsutum*, aflatoxins 1932. olive oil, effects on *Acinetobacter calcoaceticus* cell adhesion, polystyrene 776. palm oil, use, *Torulispora candida* culture, single-cell protein production 2553. roots, Orchidaceae, antimicrobial activity, bacteria, phytopathogenic fungi 4779. seeds, *Annona squamosa*, *Azadirachta indica*, vectors, rose tungro virus, pest control, *Nephotettix virescens*, *Oriza sativa* 6299. seeds, effects on *Aspergillus parasiticus* aflatoxins biosynthesis 3747. seeds, extraction, proteolytic enzymes, *Bacillus subtilis*, *Brassica napus*, Glycine max 3494. sterilization, continuous culture, antibiotics production, fermenters 9154.
- Oilseed crops**, feeds, contamination, aflatoxins 7899. *Gossypium hirsutum*, dust, gram-negative bacteria endotoxins levels 5384. oils extraction, enzymes, microorganisms 54. *Olea europaea*, industrial wastes fermentation, single-cell protein production, *Sporothrix pulverulentum*, *Trichoderma viride* 5114.
- Okra mosaic virus**, inoculation time, effects on growth, yield, *Abelmoschus esculentus* 7167. plant diseases, *Abutilon hirtum*, *Sida acuta*, *Malvastrum cormandelianum*, *Physalis angulata*, epidemiology, Nigeria 6262.
- Oleum**, oilseed crops, industrial wastes fermentation, single-cell protein production, *Sporothrix pulverulentum*, *Trichoderma viride* 5114.
- Olea europaea**, cucumber mosaic virus isolation, Italy 6248. leaves, survival, *Pseudomonas syringae* pv. *savastanoi*, pathology 6253. olive latent ringspot virus infection, plant viruses characterization 2016. pathogenicity, *Pseudomonas syringae* pv. *savastanoi* 4558.
- Oleandromycin**, antibiotic resistance, *Staphylococcus aureus*, relationship protein A biosynthesis 9054. biosynthesis, fermenters parameters 6545. comparison, 4'-deoxy-4'-sulfonamido-oleandromycin, derivatives, antibacterial activity, *Staphylococcus aureus* 3121. fungi biodegradation 2254. production, Streptomyces antibiotics, optimization 2276. Streptomyces antibiotics, biosynthesis, agitation, aeration effects on 2277.
- Oleic acid**, antagonism, gentamicin bacteriostasis 4052. 2'-5'-Oligo(A), analogs, antiviral activity mechanisms, herpes simplex virus 3065. antiviral activity, cytoplasmic polyhedrosis virus, *Bombyx mori* isolates 473. Oligo-1,6-glucose, *Bacillus cereus*, purification, immunoaffinity chromatography, characterization 103.
- Oligodeoxyribonucleotides**, synthesis, use, polynucleotide synthetase(ATP), phage T4 621.
- Oligoribonucleotides**, synthesis, use, polynucleotide synthetase(ATP), phage T4 622.
- Oligosaccharides**, α -amylase hydrolysis, *Thermoactinomyces vulgaris* 1777. antigen O, structure, *Vibrio cholerae* 1825. biosynthesis, *Shigella flexneri* lipopolysaccharides 1834. carbohydrate composition, glycolipids, structure, *Mycobacterium leprae* 9244. extracellular, carbohydrate composition, *Rhizobium*, role roots infection, Leguminosae 2633. lipopolysaccharides, structure, *Neisseria meningitidis* 1832. polysaccharides, structure, *Streptococcus pneumoniae* 1833.
- Olivanic acids**, analogs, antibacterial activity, gram-positive bacteria, gram-negative bacteria 1335. structures, Streptomyces olivaceus 6579.
- Olive latent ringspot virus**, infection, *Olea europaea*, plant viruses characterization 2016.
- Olive oil**, detection, aflatoxin B1, ochratoxin A, thin-layer chromatography 1931.
- Olive**, fermented food, microorganisms 5331. food processing wastes, fungi biodegradation, proteins production 871.
- Olivoretin A**, Streptovorticillium olivoreticuli, structure, X-ray absorption spectroscopy 7478.

- Olivoretin D**,
Streptoverticillium olivoreticuli, structure, X-ray absorption spectroscopy 7478.
- Omphalotus olivaceus**,
illudoids biosynthesis 527.
- Onchocerciasis**,
vectors, biological control, streams, Simulium ochraceum, Bacillus thuringiensis, Mexico 6915.
- Onions**,
post-harvest decay, neck rot, Botrytis allii, harvesting, drying effects on 8055.
- Oncyliurus latus**,
grazing effects on competition, Mycena galopus, Marasmius androsaceus, decomposition, leaf litter, Picea sitchensis 8940.
grazing, effects on soil vertical distribution, Mycena galopus, Marasmius androsaceus, forests, Picea sitchensis 8939.
- Oscopora lactis**,
dairy starters, ripening, cheese 6978.
triacylglycerol lipase, Aves feeding, captivity 7008.
triacylglycerol lipase, purification, characterization 6852.
- Oospores**,
Peronosclerospora sorghi, detection, Zea mays, seeds 7964.
production, Phytophthora infestans, Phytophthora drechsleri induction, pathogenicity, late blight, Solanum tuberosum 8034.
Pseudoperonospora cubensis, downy mildew, incidence, Lagenaria siceraria, Cucurbita moschata, India 8838.
role, Pythium ultimum survival, soil, environmental effects 3928.
staining, soil, phytophthora megasperma f.sp. glycinea 8203.
tetrazolium bromide staining, spore germination, viability 805.
- Operating theaters**,
air circulation, airborne bacteria 4139.
airborne bacteria, role communication, contamination, postoperative infection, man 4960.
airborne microorganisms, levels, medical personnel physical activity effects on 6720.
- Operons**,
isoleucine-valine operon, cloning, gene regulation, 2,3-butanedione, 2,3-pentanedione, flavor compounds 7797.
- Ophiostoma**,
caneets, suppression, damping-off, Rhizoctonia solani, Raphanus sativus 290.
- Ophiostoma ulmi**,
Dutch elm disease, biological control, Pseudomonas 2081.
- Ophrys lutea**,
endomycorrhizas, Rhizoctonia repends, laccase localization 380.
- Optimes**,
mediation, gene transfer, Ti plasmid, Agrobacterium tumefaciens, crown gall, host plants 235.
utilization, Pseudomonas, Agrobacterium tumefaciens, crown gall, plants 7131.
- Oral cavity**,
anaerobic bacteria, inflammatory diseases, antibiotics sensitivity, man 7405.
clinical isolates, Bacteroides, penicillin, antibiotic resistance, β -lactamase production 7334.
fluoride release equipment, dental caries prophylaxis, animal models 6725.
isolates, identification, nitrate reduction methodology 9310.
odor control, mouthwashes, antimicrobial activity, man 6432.
- Oral hygiene**,
effects on, dental plaque, gingivitis, maxilla surgery, man 6726.
- Oranges**,
industrial wastes, food processing, digestion (anaerobic) 6699.
juices, frozen products, microorganisms enumeration 7850.
pink rot, decay, fruit rot, cellulase association, Aspergillus aculeatus, Botryodiplodia theobromae 2049.
post-harvest decay, Penicillium italicum, Penicillium digitatum, benzimidazole resistance 2901.
post-harvest decay, stem rot, green mold, disease control, fungicides 5470.
susceptibility, Penicillium italicum post-harvest decay, ethylene treatment 3853.
- Orchards**,
CGA-15281 soil microorganisms biodegradation, structure-activity relationships, Prunus persica 5686.
Citrus, species composition, fungi 3930.
dibromochloropropane, disease control, Cronimella x-eioplax, effects on Fusarium, Pythium, roots necrosis, Prunus persica 7164.
granulosis virus biological control, effects on nontarget organisms, Cydia pomonella 4387.
Juglans regia, root rot, crown rot, Phytophthora 271.
- Orchidaceae**,
roots oils, antimicrobial activity, bacteria, phytopathogenic fungi 4779.
- Orcinol**,
biosynthesis, Verticilladiella liquid culture 972.
- Orcinol monomethyl ether**,
biosynthesis, Verticilladiella liquid culture 972.
- Orsilanins**,
Cortinarius speciosissimus, toxicity, photosynthetic apparatus, Lemna minor, structure-activity relationships 1949.
- Ores**,
extraction, silver, gold, oxidation, Thiobacillus ferrooxidans 3001.
manganese removal, Achromobacter 1287.
molybdenum, oxidation, bacteria 9031.
- Organelles**,
cell surface, cellulose binding, cellulolytic enzymes, Clostridium thermocellum 5162.
Cochliobolus heterostrophus DNA, isolation methodology 3365.
immobilization, biotechnology 5101.
immobilization, biotechnology, reviews 4976.
immobilization, books 4232.
immobilization, utilization, books 9341.
Phaseolus vulgaris, host-pathogen interactions, Colletotrichum lindemuthianum 7142.
- Organic acids**,
effects on digestion (anaerobic), sewage sludge 2352.
fermentation, rumen microorganisms, cattle 1919.
metabolism, Rhizobium bacteroids, nodules, reviews, Leguminosae 2975.
production, agar, association, autoclaves, effects on mycorrhizas spore germination 5924.
production, biomass, energy resources, digestion (anaerobic), Trichoderma reesei
- Organic acids, (continued)**
3417.
production, conversion, carbon monoxide, methanol, Butyrivibacterium methylotrophicum 3418.
production, fermentation, reactions, supports effects on, immobilized cells, Kluyvera noncitrifolia 5301.
production, nitriles conversion, Brevibacterium 3433.
production, nitriles conversion, factors affecting amidase, Brevibacterium 4271.
rhizosphere microorganisms, effects on clays dispersion, soil structure 5639.
salts, antimicrobial activity, bacteria, fungi, silage 6489.
use, Rhodospirillumae hydrogen production, nitrogen sources association 1843.
- Organic compounds**,
acids, wine, effects on fermentation, microorganisms 8672.
antimicrobial activity, microorganisms, effects on, hay, preservation 6490.
biodegradation, genetics, Pseudomonas, reviews 1013.
biodegradation, microorganisms, wastewater treatment, industrial effluents 4090.
biodegradation, reviews, books 8495.
biodegradation, waste treatment, industrial wastes, microorganisms 1015.
conversion, catalysis, immobilized cells 1003.
effects on denitrifying bacteria population levels, continuous culture reactors 660.
inhibition, nitrifying bacteria, wastewater treatment 2353.
microorganisms oxidation, oil and gas industry wastewater treatment, tar-sand combustion 3194.
petrochemicals, production, biomass 3372.
pollutants, biodegradation, ozonation, wastewater treatment 1469.
pollution, biodegradation, bacteria films, ground water 8630.
removal, gases waste treatment, use, microorganisms growth filters 3188.
sulfur, formation, soil microorganisms, forests soils 5617.
volatiles, production, effects on keratinophilic fungi growth, sporulation, soil 5648.
waste treatment 9238.
water insoluble, lipophilic, conversion, immobilized cells, immobilized enzymes 141.
Zooegloba biodegradation, activated sludge 7490.
- Organic matter**,
accumulation, soil microorganisms activity, fertilizer applications, ammonium sulfate, soil structure, pasture 5640.
biodegradation, dissolved oxygen, biochemical oxygen demand, biomass, microorganisms, ATP, waste water, rivers 1454.
biodegradation, microorganisms, succession, community development, soil, reviews 4625.
biodegradation soil microorganisms, crop fields 1265.
carbon-14 enrichment, flux, turnover, biodegradation, soil microorganisms, soil 8964.
colonization, Glomus caledonium, Glomus mosseae 6344.
composting, rhizosphere microorganisms, effects on Sorghum vulgare roots, soils (sandy), clays 2121.
decomposition, fungi, tropical environment, rain forests 2911.
decomposition, humification, mathematical models, soil microorganisms 5638.
decomposition, microorganisms, biogeochemistry, nutrient dynamics, reviews, peatlands 7254.
decomposition, microorganisms, carbon (activated), filters, wastewater treatment 2349.
forest soil, association, mineralization, carbon, nitrogen 8145.
forests soil, nitrogen mineralization 7290.
mineralization, soil microorganisms, savannahs, tropical environment, ecosystem dynamics 2941.
nutrient cycles, nutrient dynamics, soil microorganisms, crop fields 5637.
soil amendment, effects on phytopathogenic fungi damping-off, Pinus banksiana, Picea mariana 1239.
soil amendment effects on soil microorganisms population levels, mining wastes 3971.
wastes, conversion, biomass, bacteria, fungi, methodology, books 6793.
wastes, conversion, microorganisms, biomass, production, use, rural populations, rural environments, books 6794.
- Organic solvents**,
stability, phosphogluconate dehydrogenase, comparison Bacillus stearothermophilus, yeasts 73.
- Organoleptic evaluation**,
aroma compounds, musts fermentation, wine production, Schizosaccharomyces acidovorans 8933.
beer, fermentation, fermenters, yeasts 6932.
cheese, food contamination, food processing hygiene 8709.
comparison automated methods, detection bacteria, spoilage, eggs 1052.
fermented food, cassava, retting, lactic acid bacteria, Corynebacterium, Bacillus 3698.
kefir, production, lactic acid bacteria 1055.
off flavor, coliforms, spoilage, shelf life, milk 4448.
spoilage, vacuum packaging, films, oxygen permeability, mutton 5362.
wine, musts, decomposition, L-tartaric acid, L-malic acid, Botrytis cinerea 8666.
wine, musts malolactic fermentation, Leuconostoc oenos 2692.
- Organoleptic properties**,
quarg, production, starter cultures, lactic acid bacteria 1054.
wine, fermentation control effects on 6120.
wine, musts fermentation, temperature effects on 1871.
- Organs**,
detection, polyoma virus, genomes, mice, methodology 6744.
- Ornamental plants**,
disease control, composts, soil-borne diseases, Rhizoctonia 6300.
trees, diseases, books 840.
- Ornidazole**,
drug sensitivity testing, anaerobic bacteria, microaerophilic bacteria, clinical isolates 4731.
- Ornithine**,
containing lipids, mass spectroscopy, Thiobacillus thiooxidans 5024.
- Ornithine decarboxylase**,
inhibitor, purification, characterization, Escherichia coli 2588.
- Ornithogalum**,
Puccinia hordei, parasitism, characterization 7968.
- Oryza**,
nitrogen fixation, fertilizer applications 414.
- Oryza sativa**,
blast, Pyricularia oryzae, appressoria penetration, isoprothialone inhibition 2892.
blast, Pyricularia oryzae, disease control, oxytetracycline, streptomycin 7215

Oryza sativa, (continued)

cell walls, appressoria penetration, *Pycularia oryzae*, tricyclazole inhibition 2092.
 crop residues, sewage sludge, composting, actinomycetes, aerobic bacteria, cellulolytic bacteria 7492.
 disease resistance, blight, *Xanthomonas campestris* pv. *oryzae*, *Xanthomonas campestris* *oryzae* 6298.
 disease resistance, leaf scald, *Rhynchosporium oryzae* 5504.
 disease resistance, plant breeding 8896.
 disease resistance, *Pycularia oryzae* blight 1128.
 grain, contamination, aflatoxin B1 8733.
 infection, phytopathogenic fungi, pathogenesis, epidemiology, etiology 1986 inheritance, *Pycularia oryzae* blight disease resistance 5493.
 leaves, electron microscopy, *Xanthomonas campestris* pv. *oryzae*, growth, penetration 6243.
 leaves, levels, RNA, DNA, blight, *Pycularia oryzae* 7978.
 leaves, *Rhynchosporium oryzae* infection, histopathology 8793.
 lignocelluloses, biodegradation, residues, use methanogenesis, culture, *Plautus sajoi*-caju 2697.
 majorensis, disease resistance, leaf blight, *Xanthomonas campestris* var. *oryzae* 5475.
 nitrogen cycle, *Azolla pinnata* fertilizers 3963.
 nitrogen cycle, *Azolla pinnata* fertilizers 3964.
 nitrogen fixation 2993.
 nitrogen fixation, nitrogen-fixing bacteria 2964.
 nitrogen uptake, Nostoc symbiosis 3958.
 paddy fields, nitrogen cycle, rhizosphere microorganisms 7284.
 plant breeding, disease resistance 2881.
 plant breeding, disease resistance, rice dwarf virus 7202.
 plant diseases, tungro virus, pathogenesis, yield 4514.
 plant viruses, antigens, detection, latex agglutination 5416.
 planting density, paddy fields, vertical distribution, nitrogenase,
 nitrogen-fixing bacteria, rhizosphere microorganisms 7281.
 post-harvest decay, distribution, mycelia, sterigmatocystin, *Aspergillus versicolor* 8875.
 Rhizoctonia oryzae-sativae spot 5436.
 rhizoplane microorganisms, nitrogen-fixing bacteria, isolation, activity, morphology, nutrition 8235.
 rhizosphere, isolation, *Pseudomonas*, *Alcaligenes*, *Aeromonas*, nitrogen fixation 5653.
 rhizosphere microorganisms, iron reduction, dehydrogenase activity, redox potential, fertilizer applications effects on 7297.
 rhizosphere microorganisms, nitrogen-fixing bacteria, symbiosis ultrastructure 8236.
 rhizosphere, *Saprioglenaceae*, *Pythiaceae* 8220.
 rhizosphere soil composition, mature effects on 2996.
 rice ragged stunt virus, disease transmission, grassy stunt virus, Nilaparvata lugens, Nilaparvata bakeri 4520.
 rice stripe necrosis virus 7144.
 rice tungro virus, disease control, Nephrotettix virescens, vectors, carburetan, phorate, chemical control 2672.
 rice tungro virus, disease spread, Nephrotettix 7153.
 rice tungro virus, vectors, Nephrotettix virescens, pest control, Annona squamosa, Azadirachta indica, seeds oils, Nephrotettix virescens 6299.
 rice tungro virus, vectors, pest control, carburetan formulations, Nephrotettix virescens 6295.
 roots, catalase, ultrastructure, interaction, sulfur bacteria, rhizosphere 8962.
 roots, nitrogenase activity, diurnal variation, seasonal variations 5674.
 scald, Monographella albescentis, fungicides, disease control 2087.
 seedlings, blast, *Pycularia oryzae*, night temperature effects on susceptibility 7958.
 seedlings, brown spot, Drechslera oryzae, heavy metals salts effects on disease resistance 2077.
 seedlings, disease resistance, Drechslera sorokiniana inoculation 7201.
 seedlings, Helminthosporium oryzae brown spot, disease control, phytoalexins inducers 3887.
 sheath blight, Rhizoctonia solani, disease control, benzyloxypyridazines 5534.
 sheath blight, Rhizoctonia solani, disease control, dapiramicin A, dapiramicin B 4883.
 sheath blight, Rhizoctonia solani, disease resistance 7147.
 soil, mature, effects on, nitrogen fixation 6384.
 soil, wetlands, nitrogen cycle 3965.
 straw, bagasse, microwave radiation pretreatment, cellulose, Trichoderma viride 5128.
 straw, digestion (anaerobic), methanogenesis, effects on digestibility, cattle 7875.
 straw, mycoflora, mycotoxins identification 7093.
 straw, utilization, Trichoderma harzianum, production, single-cell protein, cellulase 3725.
 varieties, *Pycularia oryzae* pathogenicity, energy role 1132.
 varieties, rice ragged stunt virus disease resistance, Thailand 8100.
 varieties, sheath blight, Rhizoctonia solani, interaction, Nilaparvata lugens 8789.
 viruses, mycoplasma-like organisms, disease transmission, Cicadellidae, Delphacidae, vectors 7156.
 yield, fertilizer applications + *Azospirillum* inoculation, nitrogen fixation 1273.
Oryzochloris, structure, aspirochlorine constituents, *Aspergillus oryzae* 3150.
Oryza sativa, soil, nitrogen fixation, nitrogen-fixing bacteria 7287.
Oryzaphilus surinamensis, biological control, Beauveria bassiana 3574.
Oryzalin, effects on growth, Phytophthora cactorum, Erwinia, antagonism 2177.
Oscillatoria, \pm Acinetobacter calcoaceticus, biodegradation, octane 2191.
Osmotic potential, urine, effects on gentamicin antibacterial activity, *Escherichia coli*, *Pseudomonas aeruginosa* 3108.
Osmotic stress, inhibition, nitrogen fixation, Klebsiella pneumoniae, glycine betaine, enhancement, nitrogenase, biosynthesis 6354.
Ostrinia nubilalis, biological control, pathogens, Hyphomycetes 6909.
Otiolynchus sulcatus, biological control, Metarhizium anisopliae, Metarhizium flavoviride, temperature

Otiolynchus sulcatus, (continued)

effects on susceptibility 2650.
Otilia media, Vibrio parahaemolyticus isolation, antibiotic sensitivity testing, man 3094.
Outer membranes, damage, *Escherichia coli*, habekacin, antibacterial activity 521.
Escherichia coli, globomycin effects on, resistant mutant formation 6556.
Escherichia coli, polymyxin B derivatives antibacterial activity, complement bactericidal activity 5784.
 gram-negative bacteria, binding, polymyxins derivatives, stimulation, susceptibility, antibacterial activity, complement, antibiotics 4803.
 interaction, aminoglycoside antibiotics, *Pseudomonas aeruginosa* 9176.
 membrane proteins, membrane permeability, R factor R124 effects on, antibacterial agents sensitivity, *Escherichia coli* 4724.
 membrane proteins, ompA gene detection, Enterobacteriaceae, hybridization analysis 1616.
 membrane proteins, purification, characterization, Legionella 2561.
 membrane proteins purification, Haemophilus influenzae 3412.
Overwintering, Cochliobolus sativus, sporulation, crop residues, soil 5420.
 conidia, Claviceps purpurea infection, Poa annua 7175.
 Fusarium graminearum, crop residues, disease reservoirs, stalk rot, USA, Minnesota, Zea mays 7967.
 Malus, *Pseudomonas syringae* pv. *populans*, *Pseudomonas syringae* pv. *syringae* 6252.
 Mycosphaerella juglandis sp. nov., leafspot, Juglans nigra 7163.
 Peronospora hysocyami conidia, infectivity, blue mold, Nicotiana tabacum 8817.
 Phytophthora cinnamomi, survival, Abies fraseri seedlings 1235.
 Phytophthora citrophthora, disease resistance, Citrus 5509.
Pseudomonas syringae pv. *syringae*, Prunus persica 6247.
 Venturia inaequalis, Malus 2001.
Ovicides, pathogens, biological control, eggs susceptibility, Perieucoptera coffeella, Metarhizium anisopliae 6910.
1-Oxacephems, analogs, synthesis, antibacterial activity, structure-activity relationships, *Escherichia coli*, Klebsiella pneumoniae 4824.
 derivatives, synthesis 6521.
Oxacillin, antibacterial activity, clinical isolates, Staphylococcus 4805.
 antibacterial activity, Staphylococcus aureus, ultrastructure, growth 7448.
 antibiotic resistance, micromethods, dilution tests, Staphylococcus, use sodium chloride containing Mueller-Hinton agar 3012.
 antibiotic tolerance, dilution tests comparison, Staphylococcus aureus 6435.
 resistance, Staphylococcus, survival, Abies fraseri seedlings 1235.
 -rifamycin, antibacterial activity, Staphylococcus aureus 8356.
 Staphylococcus, antibiotic resistance, detection, use, AutoMicrobic test 2207.
 Streptococcus group B susceptibility 1381.
Oxafun, inhibition, Bacillus subtilis, antibiotics production, antagonism, Phoma betae, rhizosphere 2139.
Oxalic acid, levels, role Sclerotinia sclerotiorum, pathogenesis, virulence, Helianthus annuus 2010.
 levels, Solanaceae, fungi infection 6281.
 nutrient requirements, ozonation, wastewater treatment, Spirillum 4121.
Oxalis dillenii, hosts, tobacco ringspot virus, tomato ringspot virus 3818.
Oxalacetate decarboxylase, subunits composition, characterization α -chains transferase activity, membrane proteins, Klebsiella aerogenes 1791.
Oxaloacetic acid, dilution malate dehydrogenase, kinetics, Phycomyces blakesleeana 3454.
Oxamyl, effects on levels, activity, bacteria, algae, soil, leaf litter 9025.
Oxanthromycin, biosynthesis, Actinomadura, characterization 6561.
Oxazinomycin, production, *Pseudomonas paucimobilis*, characterization 6564.
Oxi Fern tube test, comparison N/F system, identification, non-fermentative gram-negative bacteria, clinical isolates 683.
Oxidants, disinfection 1510.
Oxidase, association, bacteria detection methodology 1580.
 bacteria growth, Campylobacter media (selective) 1654.
 extracellular enzymes, detection, molds 1799.
Oxidative metabolism, phenols removal, wastewater treatment, activated sludge 5847.
Oxidative phosphorylation, coupling factor 1 subunits, characterization, comparison, *Escherichia coli*, Salmonella typhimurium 3440.
 mitochondria, uncouplers, averufin 4472.
Oxidizing agents, stereoselectivity, synthesis, 6-acetylindene penicillanates, 6-acetyl penicillanates 6538.
N-Oxime ethers, antifungal activity, feeds, preservatives 8713.
Oxirapentin, structure, isolation, Beauveria felina 2310.
2-Oxoisovalerate dehydrogenase, subunits, amino acid composition, *Pseudomonas putida*, comparison *Escherichia coli* 6831.
2-Oxo-penamams, synthesis, benzylpenicillin 8537.
 β -Oxoesters, reduction, Thermoanaerobium brockii 8654.
Oxoglutarate dehydrogenase (lipamide), +dihydrolipoamide succinyltransferase + dihydrolipoamide dehydrogenase multienzyme complexes, mechanisms, kinetics, *Escherichia coli* 7699.
 +dihydrolipoamide succinyltransferase + dihydrolipoamide dehydrogenase multienzyme complexes, thioctic acid localization, electron microscopy, *Escherichia coli* 7702.
Oxolinic acid, antibacterial activity 6455.

Oxolinic acid, (continued)

comparison, norfloxacin, antibacterial activity, Enterobacteriaceae 7373.
cross-resistance, *Pseudomonas aeruginosa*, *Escherichia coli* 6421.

3-Oxosteroid Δ^1 -dehydrogenase,

activity, hydrocarbon supersaturation, immobilized cells, *Arthrobacter simplex* 3523.

H-Oxy-3-amino-2-azetidinone,

synthesis, antibacterial activity, gram-negative bacteria 9206.

Oxycarboxin,

fungicides, disease control, leaf rust, stripe rust, triticum aestivum 2904.

Oxygen,

adsorption rates, bacteria media (culture), aeration column, sewage treatment 3291.

Alnus rubra nodules, effects on nitrogenase activity, *Alnus rubra* 4606.

atmospheric pressure, effects on, *Malilotis japonicus*, *Ilex pedunculosa*, bark, nitrogen-fixing bacteria activity 8148.

carbon dioxide reaction mechanisms, cytochrome c oxidase, kinetics, thermophilic bacteria 7755.

content, fermenters 2674.

diffusion, nodules, *Rhizobium*, nitrogenase activity, acetylene inhibition, Leguminosae 8252.

effects on *Aspergillus aflatoxins* biosynthesis, in vitro 7071.

effects on dehydrogenase activity, soil 8988.

effects on *Glomus macrocarpus*, inoculation, growth, *Eupatorium odoratum* 7256.

effects on, microorganisms, digestion (anaerobic), animal wastes, methanogenesis 8177.

effects on nitrogenase, acetylene reduction, *Rhizobium bacteroides*, *Vigna unguiculata*, *Arachis hypogaea* 7291.

effects on *Rhizobium leguminosarum*, nitrogen fixation, nodules, *Pisum sativum* 2987.

ethanol production, *Saccharomyces cerevisiae*, effects On 3603.

free radicals, photochemistry, role lignin degradation, models, fungi 3663.

inactivation, nitrogenase complex, *Azotobacter vinelandii* 865.

incorporation, erythromycin biosynthesis, *Streptomyces erythraeus* 7452.

incorporation, *Phanerochaete chrysosporium*, lignin biodegradation 4431.

inhibition nitrogenase, nitrogen fixation, nitrogen-fixing bacteria 2610.

ions, production, cercosporium, photoinduction 7901.

levels, effects on superoxide dismutase, radiosensitivity, spores, *Bacillus subtilis* 4743.

musts, effects on ethanol production, yeasts 6122.

nitrous oxide bioaccumulation association, reduction inhibition, *Pseudomonas* 2157.

permeability, films, packaging, inhibition, growth, *Clostridium botulinum*, luncheon meat 7023.

aliphatic alcohols effects on, activated sludge, wastewater treatment 6675.

continuous culture, batch culture, Enterobacter aerogenes 6776.

dissolved oxygen, mathematical models, activated sludge 6690.

monitoring, automated methods, biochemical oxygen demand, activated sludge 6688.

monitoring, ethanol production, fermentation, computer applications, *Saccharomyces cerevisiae* 6140.

phenol inhibition, monitoring, computer applications, activated sludge 6703.

Oxygenase consumption,

aliphatic alcohols effects on, activated sludge, wastewater treatment 6675.

continuous culture, batch culture, Enterobacter aerogenes 6776.

dissolved oxygen, mathematical models, activated sludge 6690.

monitoring, automated methods, biochemical oxygen demand, activated sludge 6688.

monitoring, ethanol production, fermentation, computer applications, *Saccharomyces cerevisiae* 6140.

phenol inhibition, monitoring, computer applications, activated sludge 6703.

Oxygenase,

activity, metabolism, biodegradation, isobutane, propane, *Nocardia paraffinicum* 8275.

purification, characterization, lignin biodegradation, *Phanerochaete chrysosporium* 6011.

Oxygenation,

composting, temperature, evaporation, ventilation 4085.

fermenters, animal wastes, digestion (aerobic) 4108.

fermenters, microorganisms 3230.

Oxymino-cephalosporins,

structure-activity relationships, interaction *Escherichia coli* β -lactamase, *Streptomyces* serine proteinase, zinc proteinase 6832.

Oxyteracycline,

antibiotic resistance, animal isolates, mastitis, *Streptococcus agalactiae*, *Staphylococcus aureus*, *Streptococcus* 9083.

antifungal activity, in vitro, *Pycnaricia oryzae*, disease control, blast, *Oryza sativa* 7215.

drug sensitivity testing, *Branhamella catarrhalis* 9087.

production, continuous culture, *Streptomyces rimosus* 4056.

Oxytocin,

antibiotic synergism, antibacterial activity, sepsis experimental infection, clinical trials 6585.

Oxytril CM,

antibacterial activity, *Streptomyces* soil isolates 4737.

Ozonation,

aromatic compounds, biodegradability, wastewater treatment 2371.

pollutants, biodegradation, wastewater treatment 1469.

pollutants, biodegradation, wastewater treatment 1480.

wastewater treatment, oxalic acid, acetic acid, nutrient requirements, *Spirillum* 4121.

Ozone,

Allium cepa, effects on *Botrytis* infection 8000.

bactericidal activity, cooling towers bacteria 5851.

+biodegradation, trichloromethanes removal, water treatment 7497.

disinfection, waste water 6672.

disinfection, wastewater treatment, microbial pollution, enterovirus 2372.

inactivation, enterovirus, sewage 4928.

microbiocidal activity, nosocomial environments 2411.

pretreatment, lignocelluloses, cellulolytic enzymes activity, rumen microorganisms 3459.

pretreatment, lignocelluloses, effects on biodegradation 1880.

synergism, chlorine, disinfection, sewage effluents, poliovirus 1 6694.

Pachyolen tannophilus,

chromosome number, association, ethanol, production 147.

ethanol, fermentation, monitoring, measuring techniques 3611.

ethanol production 3621.

ethanol production, xylene conversion 3595.

ethanol production, xylene fermentation 3596.

ethanol production, xylene fermentation, trifluoroacetic acid hydrolysis, hemicelluloses, straw, *Triticum aestivum* 8657.

hemicellulose conversion, ethanol production 3620.

mutants, enhancement, growth, ethanol, fermentation, association, xylene 6144.

peat hydrolysates, fermentation, ethanol production 6930.

xylene conversion, ethanol production 3657.

xylene fermentation, ethanol production 171.

xylene fermentation, ethanol production 5281.

xylene fermentation, ethanol production 5285.

xylene fermentation, ethanol production, comparison, *Pichia stipitis* 6136.

Packaging,

films oxygen permeability, inhibition, growth, *Clostridium botulinum*, luncheon meat 7023.

nitrogen, spoilage, psychrotrophic bacteria 5363.

pasteurization, cold storage, shelf life, seafood, *Crassostrea virginica* 8720.

pork, effects on bacteria growth, spoilage 4465.

Paddy fields,

activity, nitrifying bacteria, denitrifying bacteria 404.

animal applications, formulations, distribution, *Bacillus thuringiensis* 6902.

insecticides inhibition nitrogen fixation, rhizosphere microorganisms 1283.

planting density, vertical distribution, nitrogenase, nitrogen-fixing bacteria, rhizosphere microorganisms, *Oryza sativa* 7281.

Psorophora columbie biological control, *Bacillus thuringiensis* 5264.

rhizosphere microorganisms, nitrogen cycle, *Oryza sativa* 7284.

soil microorganisms, biomass mineralization, nutrient cycles, carbon, nitrogen 5632.

soil microorganisms, reviews 377.

Paecilomyces

composts, suppression, damping-off, *Rhizoctonia solani*, *Raphanus sativus* 290.

Paecilomyces fusos-roseus,

beauvericin biosynthesis 8379.

Paecilomyces fusisporus,

composts, phosphatase activity 7491.

Paecilomyces lilacinus,

antibiotic P168, structure 9207.

antifungal activity, miconazole 4016.

leucinostatin, separation, characterization 3144.

leucinostatin structure, peptide antibiotics, leucinostatin structure, *Paecilomyces lilacinus* 3145.

pathogens, biological control, observation methods, *Globodera rostochiensis* 5224.

Paecilomyces marquandii,

peptides, phytooxins, antibiotics, structure, antibacterial activity, antifungal activity 8742.

Paecilomyces varioti,

feeds, chickens, nutritive value 7103.

Pekilo process, sulfite liquor fermentation, single-cell protein production, monitoring, computer applications 5968.

single-cell protein production, biomass measurements, sulfite liquor, Pekilo process 5965.

biodegradation, control, biocides 1288.

+Candida utilis, fermentation, *Saccharum officinale* crop residues 3686.

Paederus affertii,

host-pathogen interactions, host-parasite interactions, predator-prey interactions, *Spodoptera littoralis*, *Bacillus thuringiensis*, *Zeile chlorophthalma*, Egypt, Arab Rep. 128.

Paintings,

biodegradation, molds 1027.

Paints,

films, fungicides, chemical control, fungi, growth 1290.

industrial effluents, wastewater treatment, biodegradation 2380.

microorganisms biodegradation, books 1583.

preservatives 1291.

tin biocides, inhibition activated sludge, wastewater treatment 6673.

4-tolyldiiodomethylsulfone, antifungal activity 1289.

Pakistan,

Agaricus dispar, culture 7870.

Ascochyta rabiei blight, *Cicer arietinum*, reviews 3789.

epidemiology, *Verticillium albo-atrum* wilt, *Cicer arietinum* 1117.

granulosis virus, biological control, *Agrostis segetum* 6079.

Puccinia rust epidemics, *Triticum*, LANDSAT, monitoring 6246.

Tilletia foetida, bunt, virulence, races, *Triticum aestivum* 7965.

Palaeonotus vulgaris,

nontarget organisms, pathogenicity, infectivity, toxicity testing, baculovirus 6921.

Paleoenvironments,

bacteria nitrogen fixation evolution, biosphere 2171.

Palisadum,

detection, antibiotics, spectrophotometry methodology 496.

Palm oil,

use, fungi single-cell protein production 872.

use, *Torulopsis candida* culture, single-cell protein production 2553.

Palmitic acid,

carriers, synthetic peptides, antibody response, use 6588.

synergism, gentamicin bacteriostasis 4052.

Palmitoyl-tetractinamine,

antibacterial activity 3160.

Pan troglodytes,

peptides, synthetic, vaccines production, immunogenicity, hepatitis B virus 6615.

Pancreas,

secretions, stimulation antibacterial activity, chloramphenicol, phanquinone, chloroquinolol, man 9088.

Panicum virgatum,

spot blotch, *Helminthosporium sativum*, pathogenicity, host range 2794.

Panonychus ulmi,

nontarget organisms, granulosis virus biological control effects on, orchards, *Cydia pomonella* 4387.

- Papaya leaf reduction virus**, plant diseases, Carica papaya, biochemical characteristics association pathogenesis 8812.
- Papaya mosaic virus**, plant diseases, Carica papaya, etiology 4524.
- Papaya ringspot virus**, comparison, watermelon mosaic virus 1, host range, Cucumis 8039, mutants, use, biological control, infection, Chenopodium quinoa 8110.
- Papayas**, post-harvest decay, Stemphylium lycopersici, pathogenesis 1164.
- Paper**, hydrolysis, cellulolytic enzymes, vinyls stimulation 4330, postal stamps, biodeterioration, fungi 3649, preservatives 1291, production, starch hydrolysis, enzymes, fungi, paper mills 49.
- Paper mills**, industrial effluents, wastewater treatment, lagoons, mutagenicity industrial effluents 4903, industrial wastes, composting 5836, industrial wastes, lignocelluloses hydrolysis, fuels production, cellulolytic microorganisms 7781, pulp mills, lignin hydrolysis, enzymes, fungi 49, use, biotechnology, wastewater treatment, production, reviews 8397.
- Papillae**, solanum tuberosum disease resistance correlation, Phytophthora infestans infection 6303.
- Papilloma virus (bovine)**, cloning vectors, transfection mammalian cells 629.
- Papovavirus**, immunoelectron microscopy, solid phase methods, cell culture 599.
- Paraleucanidin B**, antifungal activity, cell walls, ultrastructure, Candida albicans 9108, antifungal activity, glucans biosynthesis inhibition, Saccharomyces cerevisiae, Candida albicans 1440, effects on, Schizosaccharomyces pombe, β -glucans, biosynthesis 2223.
- Papularia apheosperma**, papulacandin B, antifungal activity, glucans biosynthesis inhibition, Saccharomyces cerevisiae, Candida albicans 1440.
- Papulosporea byssina**, pathogens, disease control, thiabendazole, Agaricus brunnescens 8132.
- Paracacin**, iron chelating agents, antiviral activity, DNA biosynthesis, ribonucleoside-diphosphate reductase, herpes simplex virus 1, vesicular stomatitis virus 8335.
- Paracaricaria concolor**, vectors, little leaf disease transmission, rickettsia-like organisms, mycoplasma-like organisms, treatment, Wassilia periplocifolia, Jamaica 2047.
- Paracoccidioides brasiliensis**, antigens, production methodology, immunodiffusion relationship 4228, viability, determination methodology 2535.
- Paracoccus denitrificans**, cytochrome c oxidase, isolation, amino acid sequence, homology mitochondria 897, denitrification, wastewater treatment, industrial effluents 8406, ferrioxochrome C50, ferrioxochrome C50, N.M.R. 7701.
- Parainfluenza virus**, assays, use, poly(I-C) 5890, detection, indirect fluorescent antibody test methodology, children 1565, infection, diagnosis, enzyme immunoassay, use, antigens, man 9276, serotypes, enzyme immunoassay, cell culture 602, structural proteins analysis, erythrocytes adsorption 5887.
- Parainfluenza virus 3**, analogs antiviral activity 4772, glycoproteins, crossed immunoelectrophoresis, resolution 8449.
- Parasit**, effects on growth, Phytophthora cactorum, Erwinia, antagonism 2177, inhibition, ectomycorrhizas, non-target organisms, seedlings, Pinus sylvestris 5570, Nitrosomonas europaea, Nitrobacter agilis, effects on growth 2176.
- Parasitiae**, fungi, soil, Antarctica 8982, Harposporium anguillulae, Verticillium, Rhizobitis, Aphelenchus, Mexico 2126.
- Parasitism**, Catenaria anguillulae, spores, Phytophthora cinnamomi, Phytophthora parasitica, biological control, root rot, Citrus, Persea 5515, Helicotylenchus digonicus, roots, interspecific relationships, mycorrhizas, Pinus strobus, Pinus exotica 348, nematophagous fungi, Nematode population dynamics, activated sludge 7537, Puccinia hordei, Hordeum spontaneum, Ornithogalum, characterization 7968, Trichoderma, phytopathogenic fungi biological control, ultrastructure 1213.
- Parasponia**, nodulation, nitrogen fixation, Rhizobium 2977, nodules, Rhizobium, hemoglobin levels, energy metabolism, nitrogenase 2898.
- Parathion-methyl**, biodegradation, industrial wastes, bacteria, fungi 3677, biodegradation, xenobiotics, inhibition, exudates, aquatic microorganisms 8687.
- Paratuberculosis**, diagnosis, cattle, enzyme-linked immunosorbent assay methodology, Mycobacterium paratuberculosis proteolism peptides 4185, diagnosis, immunoperoxidase test 3323.
- Parenteral nutrition**, disease control, man 2419.
- Parks**, wastewater treatment, USA, Florida 5845.
- Parthenium argentatum**, growth, latex levels, stimulation, inoculation, vesicular-arbuscular mycorrhizas 5622, yield stimulation, inoculation, rhizosphere, pseudomonas 8213.
- Parthenium hysterophorus**, allelopathy, inhibition nodulation, Indigofera linnaei 8987.
- Parthenoclaus cinquofoia**, hosts, tobacco ringspot virus, tomato ringspot virus 3818.
- Particulate pollution**, microorganisms, aerosols, association, harvesting machinery, measuring techniques, mathematical models 3229.
- Partition**, Acinetobacter calcoaceticus cells, growth characterization, hydrocarbons
- Partition, (continued)** metabolism 3006.
- Parvovirus**, chlorine disinfection, temperature effects on 6484, detection, immunoassays methodology, man 4157.
- Parvovirus H-1**, inactivation, chlorine, characterization 475.
- Parvovirus (porcine)**, infection, diagnosis, gel diffusion precipitin test, pigs 5879, vaccines production, oils emulsions, pigs 7487.
- Paspalic acid**, elymoclavine, conversion, physicochemical properties, Claviceps 5252.
- Paspalum notatum**, growth, soil, association, Fusarium oxysporum f.sp. niveum infestation, effects on levels 3826, vesicular-arbuscular mycorrhizas sporulation, phosphate soil amendment induction 2134.
- Passeifera adularis**, isolation rhabdovirus like viruses 266.
- Passive hemagglutination**, comparison, fluorescent antibody test, serotyping, Campylobacter fetus subsp. jejuni 3293, methodology, coronavirus (bovine) detection, feces 5886, Neisseria gonorrhoeae, ribosomes antigens, immunodiagnosis, gonorrhea, man 714, rotavirus (human) detection, feces 1552, use, Cytomegalovirus binding erythrocytes, methodology 643.
- Passive reverse hemagglutination**, comparison, enzyme-linked immunosorbent assay, sensitivity, specificity, hepatitis B surface antigen 7568, detection Staphylococcus enterotoxins, food contamination 7905, methodology, duck plague virus detection, ducks 9277.
- Pasteurella**, antibodies, detection, indirect hemagglutination 723.
- Pasteurella hemolytica**, antibiotic resistance, characterization 3011, + Clostridium, vaccines, sheep, efficacy, experimental infection, gnotobiotics (specific pathogen free) 7488, serotyping, indirect hemagglutination methodology 1631.
- Pasteurella multocida**, antibiotic resistance, chlorination effects on, sewage isolates 6437, antibiotic resistance, enzyme-linked immunosorbent assay, detection, chickens 5074, fowl cholera, vaccination, enzyme-linked immunosorbent assay, indirect hemagglutination, chickens 3343, indole test 716, media (selective) 2507, media (selective), isolation, pigs 5912, toxins, bioassays 8761, toxins, purification, characterization 7118.
- Pasteurella tularensis**, media (selective) 3357.
- Pasteurization**, beverages, microorganisms contamination, cooling water 1913, cheese, survival, Staphylococcus aureus, Salmonella 1902, digestion (anaerobic), sewage sludge, land disposal 2351, milk, cold storage, spoilage, bacteria 1910, milk, coliforms, spoilage 1912, milk, shelf life, refrigeration, proteolytic enzymes, bacteria spoilage 6175, milk, emulsions, antimicrobial activity, mathematical models, bacteria, biodeterioration 1287, packaging, cold storage, shelf life, seafood, Crassostrea virginica 8720, soil, disease control, Trifolium subterraneum, damping-off, root rot, Pythium, Fusarium avenaceum 6301, solar radiation, heat treatments, water purification, contamination, water, methodology 3225, steam, freezing, spoilage, Clostridium botulinum type E toxins production, seafood, Crassostrea virginica 5364.
- Pasteurized milk**, quality, heat treatments, storage conditions 8711.
- Pasture**, Actinomyces distribution, incidence, nematicides effects on 7295, environment management, nutrient dynamics, soil microorganisms 8963, Lolium perenne, canker infection, toxins production, Corynebacterium rathayi 6215, Medicago, root rot, phytopathogenic fungi 6233, nitrogen cycle, soil microorganisms activity, New Zealand 7268, rhizosphere, nitrogenase activity, nitrogen-fixing bacteria, environmental factors 9018, soil microorganisms, biomass, biochemical characteristics, New Zealand 6346, soil structure, organic matter accumulation, soil microorganisms activity, fertilizer applications, ammonium sulfate 5640.
- Patents**, biotechnology 8508, brewing, culture collections, microorganisms 6934.
- Pathogens**, airborne microorganisms, wastewater treatment 3186, antibacterial activity, cephalosporins 4818, bacteria, indicator species, population levels, water temperature, rivers, estuaries 4131, bacteria, microbial pollution, estuaries 6713, bacteria, plants, hormones, mediation, tumorigenesis 6856, bacteria, surveys, use biological control, Insecta 4390, biological control, Bacillus sphaericus, Bacillus thuringiensis, Culicidae 1841, biological control, dose-response effects, mortality, Culicimomyces clavosporus, Aedes aegypti 6911, biological control, efficacy, persistence, ponds, Bacillus sphaericus, Culicidae 6914, biological control, Hyphomycetes, Ostrinia nubilalis 6909, biological control, Mansonia uniformis, Bacillus thuringiensis 123, biological control, nuclear polyhedrosis virus propagation, association, bacteria, fungi, Lymantria dispar 6907, biological control, oviducts, eggs susceptibility, Perileucoptera coffeella,

Pathogens, (continued)

- biological control**, persistence, recycling, growth, *Bacillus sphaericus*, *Culicidae* 6920.
- biological control**, pests, nuclear polyhedrosis virus, experimental infection, mammalian cells, *Mammalia* 6896.
- biological control**, production, formulation, *Bacillus sphaericus*, *Culicidae* 6897.
- biological control**, snow pools, *Bacillus thuringiensis*, *Aedes*, USA, Michigan 6915.
- carcasses disposal**, environmental hygiene 2360.
- Ceolomomyces psorophorae**, host range, use biological control, *Culicidae* 4395.
- contamination**, medicine containers, nosocomial environments 1503.
- disease control**, design, laboratories 1523.
- disease transmission**, disease control, occupational hazards, laboratories 1522.
- disinfection**, sewage sludge, environmental hygiene 2365.
- disinfection**, wastewater treatment 550.
- effects on hemolymph amino acids**, larvae, *Spodoptera littoralis*, *Bacillus thuringiensis* 6912.
- Entomophthora planchoniana**, biological control, orchards, Italy, *Corylobium* 5234.
- epidemiology**, ecosystem management, biological control, weed control 3894.
- Erynia aquatica**, pathogenicity, biological control, *Aedes cantator* 2665.
- Erynia neophidis**, biological control, field trials, *Strophilus avenae*, *Metoprolapha dirhodum* 5229.
- exposure time effects on mortality**, recovery, *Bacillus thuringiensis*, *Choristoneura* 3555.
- foliar applications**, efficacy, persistence, biological control, *Bacillus thuringiensis*, *Choristoneura fumiferana* 3556.
- fungi**, antigens extracts, thimerosal, formaldehyde, disinfection, clinical microbiology 810.
- fungi**, *Rhizobium japonicum* growth, Glycine max, pesticides effects on 1212.
- growth**, comparison bacteria contamination, blood culture 3352.
- Hospital wastes**, sanitation, waste disposal 1520.
- host range**, plant diseases geographical distribution, Seychelles 5398.
- inactivation**, composting, sewage sludge 5839.
- inactivation**, monitoring, sewage sludge, composting 5840.
- integrated control**, weed control 3898.
- isolation**, culture, *Entomophthora gammsea*, *Pseudoplusia includens* 6088.
- Lagenidium giganteum**, biological control, *Culicidae*, aquatic environment 30.
- Leguminosae giganteum**, biological control, susceptibility, *Chaoborus flavicans* 5235.
- microbial pollution**, water analysis, reviews, bibliographies 4946.
- Micrococcus pseudoflavidifex**, biological control, larvae, *Lymantria dispar* 5260.
- Nemoura nilei**, virulence, conidia, biological control, *Trichoplusia ni* 6900.
- nuclear polyhedrosis virus**, biological control, *Rachiplusia nu*, *Rachiplusia* ou 2659.
- nuclear polyhedrosis virus**, *Tipula iridescent virus*, bacteria, natural enemies, surveys, use, biological control, *Tipula paludosa* 2662.
- plant diseases**, bacteria, identification 3779.
- plant diseases**, biological control, bacteria, fungi, plant viruses 4231.
- plant diseases**, check lists, phytopathogenic fungi, bacteria, plant viruses, *Brunei*, books 7640.
- plant diseases**, pollution effects, acid rain 7920.
- plants**, biological control, books 844.
- plants**, *Nematoda*, interaction, endomycorrhizas, reviews 392.
- plants roots**, fungi, interaction, ectomycorrhizas, reviews 393.
- propagation**, biological control, whey recycling methodology, *Insecta*, *Bacillus thuringiensis*, δ -toxin 6899.
- reduction**, *Fusarium oxysporum*, *Corynebacterium michiganense*, digestion (anaerobic), agricultural wastes 8390.
- safety regulations**, weed control, biological control 3897.
- Salmonella**, pollution control, sewage sludge, digestion (anaerobic) 2368.
- Setaria marcescens**, *Pseudomonas aeruginosa*, biological control, toxicity, *Solenopsis richteri*, *Solenopsis invicta* 5257.
- traveller's diarrhea**, media (transport), isolation, methodology 9309.
- viruses**, Escherichia coli, public health, sewage sludge, land disposal 2367.
- waste disposal**, hospitals, environmental hygiene 2359.
- weed control**, biological control 3889.
- Penicillium**
- biosynthesis**, *Byssoschlamys nivea*, biomass, factors affecting 6207.
- biosynthesis**, manganese, nutrient requirements, media (culture), *Penicillium ulmense* 5796.
- detection**, apples, fruit juices, fruit concentrates, screening, gas chromatography, methodology 7096.
- identification**, *Penicillium* food contamination cheese 7080.
- incidence**, *Areca catechu* nuts, India 7087.
- production**, *Byssoschlamys nivea*, factors affecting 1926.
- production**, nitrogen sources, immobilized cells, *Penicillium ulmense* 2757.
- Paul-Bunnell antibody**, Epstein-Barr virus, detection, use, horses erythrocytes sialoglycoproteins latex agglutination 1563.
- Paxillus involutus**, biological control, antagonism, ectomycorrhizas soil-borne diseases, *Fagus* 5513.
- spore germination**, organic acids production, agar, association, autoclaves, effects on 5934.
- PCB**, biodegradation, fungi, bacteria, reviews 7827.
- biodegradation**, soil microorganisms 8976.
- sorption**, microorganisms, soil 388.
- PCNB**, disease control, root rot, *Ficus benjamina* 8916.
- Pea leaf roll virus**, infection, inhibition, reproduction, yield, *Vicia faba* 7938.
- Pea seed-borne mosaic virus**, disease transmission, *Lens culinaris* 4500.
- Peanut mottle virus**, infection, disease resistance, *Arachis hypogaea* cultivars germplasm 8061.
- seeds infection**, enzyme-linked immunosorbent assay screening, transmission (seed), *Arachis hypogaea* 8769.
- Peanut stunt virus**, enzyme-linked immunosorbent assay detection 7927.
- Peanuts**, aflatoxins food contamination, factors affecting production, reviews 7052.
- contamination**, aflatoxin B1, aflatoxin B2, gas chromatography, mass spectroscopy 6206.
- detection**, *Aspergillus flavus*, aflatoxins 1078.

Peanuts, (continued)

- flour, ammonium hydroxide, effects on, extraction, cooking, aflatoxins 3749.
- food contamination, aflatoxins, analysis, thin-layer chromatography, comparison, liquid chromatography 8731.
- food contamination, aflatoxins, determination, liquid chromatography 8729.
- lignin, bacteria biodegradation 177.
- meals, aflatoxins food contamination, decontamination methodology use methymlane+calcium hydroxide 7097.
- meals, detection aflatoxins food contamination, methodology comparison 7066.
- Peat**, acetylene reduction, nitrogen fixation, ethylene release, Finland 4651.
- aerobic bacteria hydrolysis, digestion (anaerobic), methanogenesis, bioreactors, methanogenic bacteria 7303.
- digestion (anaerobic), methanogenesis, reviews 8273.
- extracts, antibacterial activity, Escherichia coli 7367.
- filtration, wastewater treatment, identification, fungi 7494.
- hydrolysates, biomass, single-cell protein, production, sodium chloride, humic acids effects on, *Candida tropicalis* 6809.
- hydrolysates, fermentation, ethanol production, yeasts 6930.
- hydrolysates, growth factors, single-cell protein production, *Candida utilis* 6806.
- hydrolysates, media, *Aureobasidium pullulans*, pullulan biosynthesis optimization 6055.
- hydrolysates, production, biomass, single-cell protein, conferences, fungi 7645.
- inoculum, *Rhizobium phaseoli*, survival 406.
- methanogenesis, temperature effects on 8264.
- single-cell protein, media (culture), production, biomass, single-cell protein, *Agaricus campestris*, *Morchella esculenta* 6807.
- soil inoculum, carbohydrates effects on *Rhizobium* 4642.
- use, deodorization industrial pollution 9232.
- Peatlands**, actinorhizae nitrogen fixation, litter decomposition, nitrogen cycle, *Mirya* 824.
- microorganisms, biodegradation, physicochemical properties 2152.
- nitrogen-fixing bacteria, actinorhizae, nitrogen fixation, seasonal variations, *Mirya* 846 9001.
- organic matter decomposition, microorganisms, biogeochemistry, nutrient dynamics, reviews 7254.
- Pectate lyase**, physicochemical properties, *Pseudomonas solanacearum* 8611.
- spirochaetes, isolates 6824.
- Pectin**, growth, *Saccharomycopsis fibuliger*, biodegradation, waste treatment 7831.
- pectinesterase catalysis, *Trichoderma* 8595.
- Pectin lyase**, isolation, purification, chromatography, isoelectric focusing, *Penicillium oxalicum* 7720.
- production, *Colletotrichum lindemuthianum* 5185.
- production, continuous culture, *Aspergillus niger* 8601.
- Pectin-degrading bacteria**, coffee fermentation 5324.
- Pectinase**, biodegradation, *Daucus carota* 8538.
- Pectinesterase**, activity, cell culture, *Xanthomonas malvacearum* 3516.
- catalysis, pectin, *Trichoderma* 8595.
- production, continuous culture, *Aspergillus niger* 8601.
- purification, characterization, *Aspergillus oryzae* 6862.
- spirochaetes, isolates 6824.
- Pectin lyase**, purification, characterization, *Aspergillus oryzae* 6862.
- Pectinolytic enzymes**, activity, cell culture, *Xanthomonas malvacearum* 3516.
- activity, temperature, pH effects on, *Clostridium pectinifermentans* 7737.
- activity, *Tetrachætum elegans*, biodegradation, *Alnus* leaves, calcium concentration effects on 1002.
- applications, food industry, reviews, microorganisms 2598.
- Botrytis fabae* chocolate spot, *Vicia faba* 3734.
- characterization, *Clostridium pectinifermentans* 4348.
- Erwinia carotovora*, retting, bark, *Broussonetia kazinoki* 7680.
- isozymes, isolation, purification, chromatography, isoelectric focusing, *Penicillium oxalicum* 7720.
- microorganisms, cleaning, membranes, filtration, industrial water systems 57.
- microorganisms, crop residues conversion, silage, fermentation 213.
- nutrition, *Klebsiella pneumoniae*, wood decay 4423.
- production, agricultural wastes, *Aspergillus niger* 8605.
- production, *Aspergillus niger*, use pulp, *Agave fourcroydes* 5189.
- production, continuous culture, *Aspergillus niger* 8601.
- production, factors affecting, *Aspergillus awamori* 8606.
- production, liquid culture, inoculum levels effects on, *Aspergillus alliaceous* 4352.
- production, *Phoma exigua* seed rot, *Vigna radiata* 3797.
- spirochaetes, isolates 6824.
- wine, microorganisms 164.
- Pectinophora gossypiella**, biological control, toxicity, δ -endotoxin, *Bacillus thuringiensis* 5247.
- Pediatrica**, antibiotics, drugs, antimicrobial activity, clinical trials, pharmacokinetics, pharmacology, reviews 5942.
- in vitro, erythromycin, lincomycin, clindamycin, antibacterial activity, reviews 5783.
- metronidazole, antibacterial activity, clinical trials, pharmacokinetics, reviews 5732.
- Pediococcus**, proteolytic enzymes characterization, role, milk products production, reviews 96.
- starter cultures, aroma, sausages 7858.
- Pediococcus acidilactici**, fermentation, silage production, industrial wastes, fishery products 2753.
- fermented food 6189.
- Pediococcus cerevisiae**, fermentation, juices proteins, *Medicago sativa* 3722.
- Pediococcus cerevisiae**, fermentation, meals, soybeans, corn, effects on amino acid composition 5357.
- fermentation, vegetables, dialysis, continuous culture 2740.
- Pediococcus halophilus**, fermented food 6189.

- Pediococcus pentosaceus**, fermented food 6189.
- Pedogenesis**, rhizosphere microorganisms, interspecific relationships 394.
- Pegagan harmala**, tissue culture, antimicrobial activity, antimicrobial agents, *Staphylococcus aureus*, *Escherichia coli*, *Candida albicans* 8336.
- Pekito process**, *Paeclomyces varioti*, feeds, chickens, nutritive value 7103.
- sulfite liquor fermentation, single-cell protein production, monitoring, computer applications, *Paeclomyces varioti* 5968.
- sulfite liquor, single-cell protein production, biomass measurements, *Paeclomyces varioti* 5965.
- Pelargonic acid**, metabolism, biotin derivatives biosynthesis, *Pseudomonas* 4393.
- Pelargonium**, growth, association, phosphorus, *Glomus fasciculatum*, enhancement 2943.
- growth, *Glomus fasciculatum*, enhancement 2944.
- plant diseases, toombusvirus 4540.
- Pelargonium hortorum**, *Pseudomonas cichorii* inoculation, spot pathogenesis 4537.
- Pelleting**, calcium oxide, *Trifolium repens*, *Medicago sativa*, *Rhizobium* nodules survival association 2950.
- corn, feeds, propionic acid, preservatives, effects on fungi, contamination 7884.
- Rhizobium japonicum*, *Glycine* max seeds, Saudi Arabia 2953.
- Pellicularia filamentosa**, nicotine biodegradation 1890.
- Penams**, derivatives, antibacterial activity, structure-activity relationship, inhibition, β -lactamase 6532.
- derivatives, synthesis 6536.
- synthesis, benzylpenicillin 6537.
- Penicillic acid**, incidence, apples, India 7090.
- Penicillin**, administration association, *Staphylococcus aureus* penicillidolans detection, enzyme-linked immunosorbent assay methodology 3344.
- analogs enzymatic synthesis, β -(L-carboxymethylcysteinyl)-L-cysteinyl-D-valine substrates, *Streptomyces* *avenaeus* 5776.
- antibacterial activity, *Bacteroides melaninogenicus* protection, role, facultative bacteria β -lactamase production 5775.
- antibacterial activity, *Staphylococcus*, *Streptococcus*, cow's milk, correlation, mastitis, disease control, cattle 5773.
- antibacterial activity, *Streptococcus* group B 8361.
- antibiotic resistance, β -lactamase production, oral cavity clinical isolates 7334.
- antibiotic resistance, animal isolates, mastitis, *Streptococcus agalactiae*, *Staphylococcus aureus*, *Streptococcus* 9063.
- antibiotic resistance, antibacterial activity, cefuroxime, cefotaxime, *Staphylococcus aureus*, *Staphylococcus epidermidis* 4826.
- antibiotic resistance, association, β -lactamase, clinical isolates, *Streptococcus faecalis* 7326.
- antibiotic resistance, R factors transfer, *Staphylococcus aureus* 9044.
- antibiotic resistance, selection, *Staphylococcus aureus*, mice animal isolates 443.
- antibiotic resistance, *Streptococcus pneumoniae*, clinical isolates, USA, Colorado 436.
- antibiotic resistance, *Streptococcus pneumoniae*, methicillin, quality control, clinical microbiology 4688.
- antibiotic sensitivity testing, *Bacteroides nodosus* 3056.
- antibiotic sensitivity testing, *Neisseria gonorrhoeae* 4804.
- antibiotic sensitivity testing, *Pseudomonas aeruginosa*, clinical isolates 7416.
- antibiotic sensitivity testing, *Staphylococcus aureus* 9193.
- antibiotic synergism, gentamicin, *Bacteroides melaninogenicus*, *Bacteroides fragilis* 3118.
- antibiotic synergism, streptomycin, *Streptococcus* antibiotic resistance 444.
- antibiotic tolerance, *Streptococcus* 6434.
- antibiotic tolerance, *Streptococcus* group B 7317.
- antibiotic tolerance, *Streptococcus*, methodology 435.
- binding, blood vessels prosthetics, storage effects on antibacterial activity 2418.
- biosynthesis, genes, linkage analysis, protoplast fusion, *Aspergillus nidulans*, *Aspergillus rugulosus* 4047.
- biosynthesis, isopenicillin N synthetase, *Cephalosporium acremonium* 9195.
- biosynthesis, models, isothiazolidinone conversion, β -lactam antibiotics 6530.
- biosynthesis, models, 3-phenylthiopropionamide conversion β -lactam antibiotics 6529.
- biosynthesis, N-nitrosomethyl biuret mutagenesis, conidia, *Penicillium chrysogenum* 2268.
- biosynthesis pathway, isopenicillin N synthetase, *Cephalosporium acremonium* 6528.
- biosynthesis pathway, stereochemistry, *Cephalosporium acremonium* 6519.
- biosynthetics, glutamine, inhibition, penicillium chrysogenum 4049.
- Cephalosporium acremonium*, sulfur analogs, synthesis 8353.
- Clostridium perfringens* group sensitivity testing 3065.
- comparision vancomycin, prophylaxis, bacteria contamination, viruses isolation cell culture 1557.
- detection, cow's milk, *Bacillus stearothermophilus* agar diffusion test 7437.
- +EDTA-tromethamine, antibacterial activity, gram-positive bacteria 4816.
- fermentation, fermenters, dissolved oxygen, aeration, immobilized cells, *Penicillium chrysogenum* 7435.
- fermentation, *Penicillium chrysogenum*, automated methods, monitoring, fermenters 4833.
- leukocytes (polymorphonuclear) penetration, antibacterial activity, man 492.
- lysis, *Streptococcus faecium*, triton X-100, resistance 8352.
- Penicillium chrysogenum*, fermentation, fermenters 4832.
- production, fermentation, *Penicillium* 7434.
- production, fermenters 4044.
- production, *Penicillium chrysogenum*, computer applications 2269.
- production, *Penicillium mycelia* growth, microbeads, fermenters 2270.
- resistance, anaerobic bacteria 432.
- resistance, media (culture), *Neisseria gonorrhoeae* 718.
- sensitivity, *Bradyrhizobium japonicum* nodulation, *Glycine* max roots 5655.
- stimulation IMP biosynthesis, *Brevibacterium ammoniagenes* 115.
- Penicillin (continued)**, stimulation IMP biosynthesis, *Brevibacterium ammoniagenes* 952.
- Streptococcus* group B susceptibility 1381.
- Streptococcus*, tolerance, screening methodology 1308.
- Penicillin acylase**, activity, *Escherichia coli*, immobilized cells 71.
- affinity adsorption, immobilized enzymes 8581.
- hydrolysis, α -aminobenzylpenicillin derivatives, antibiotic resistance, *Escherichia coli*, *Bacillus megaterium* 7331.
- like enzymes, kinetics, thermodynamics, bacteria 4315.
- Plasmodium citreum*, biosynthesis, citric acid effects on 2582.
- Penicillin acyltransferase**, mutants, cephalosporin C conversion, 7-phenoxyacetamido-cephalosporanic acid, *Penicillium chrysogenum* 9183.
- Penicillin amidase**, activity, benzylpenicillin deacylation, models 7436.
- activity, benzylpenicillin deacylation, 6-aminopenicillanic acid production, bioreactors 6531.
- biosynthesis screening, bacteria isolation methodology 33.
- DNA, plasmids, transformation, *Bacillus megaterium*, production 95.
- extraction methodology, *Escherichia coli* 893.
- immobilized enzymes, dithioglycol, dithiothreitol stabilization 74.
- immobilized enzymes, matrix conformation effects on activity 1769.
- immobilized enzymes, production, penicillins, cephalosporins 4045.
- synthesis penicillins, cephalosporins, *Kluyvera citrophila*, *Pseudomonas melanogenum* 505.
- use, *Escherichia coli* immobilization, polymers substrates 778.
- Penicillin G**, antibacterial activity, clinical isolates, *Streptococcus pneumoniae* 9153.
- antibiotic resistance, clinical isolates, *Staphylococcus aureus* 2199.
- antibiotic sensitivity testing, *Bacteroides* 9159.
- antibiotic synergism, gentamicin, bactericidal activity, *Streptococcus* group G 7423.
- biosynthesis, nutrient concentrations, immobilized cells, carrageenans supports, *Penicillium chrysogenum* 4048.
- biosynthesis, 6-aminopenicillanic acid-acyltransferase kinetics, *Penicillium chrysogenum* 3490.
- leukocytes (polymorphonuclear) penetration, antibacterial activity, man 492.
- mass spectroscopy 2267.
- sterilization, radiation 1378.
- Penicillin N**, biosynthesis pathway, mutants, *Streptomyces griseus* subsp. *cryophilus* 4837.
- Penicillin V**, biosynthesis, 6-aminopenicillanic acid-acyltransferase kinetics, *Penicillium chrysogenum* 3490.
- high-performance liquid chromatography 1395.
- precursors, electrochemistry detection, fermentation 1396.
- Penicillin-binding protein**, affinity role, β -lactam antibiotics resistance, *Staphylococcus aureus* 5712.
- antibiotic resistance, ampicillin, *Haemophilus influenzae* 7338.
- antibiotic resistance, moxalactam, *Serratia marcescens* 3038.
- Bacillus megaterium*, nocardin A interaction, elongation inhibition 1397.
- characterization, *Streptococcus viridans*, clinical isolates, β -lactam antibiotics, antibiotic resistance 428.
- electrophoresis, *Escherichia coli* 3441.
- Escherichia coli*, *Pseudomonas aeruginosa*, binding, aminobenzyl-penicillin apacillin, characterization 7432.
- penicillin, *Staphylococcus aureus* 5110.
- purification, characterization, *Caulobacter crescentus* 2559.
- Penicillinase**, inhibition, Chlorophyta, Rhodophyta, marine environment, effects on, *Staphylococcus aureus*, *Escherichia coli* 8305.
- Penicillins**, antibacterial activity 510.
- antibacterial activity 2264.
- antibacterial activity, correlation, β -lactamase, biosynthesis, inducers, Enterobacteriaceae 2261.
- antibacterial activity, gram-negative bacilli 3086.
- antibacterial activity, *Staphylococcus aureus* 4842.
- antibacterial activity, use 4817.
- antibiotic resistance, cross-resistance, cephalosporins, Enterobacter, Klebsiella, *Pseudomonas aeruginosa* 7352.
- apacillin, antibacterial activity 4840.
- binding, lysozyme 9194.
- biosynthesis pathway, bacteria 491.
- Citrobacter freundii resistance, incidence 6416.
- derivatives, synthesis 6533.
- β -lactamase hydrolysis, kinetics, *Bacillus cereus* 4279.
- production, immobilized enzymes, penicillin amidase 4045.
- synthesis, immobilized enzymes 4795.
- synthesis, Penicillin amidase, *Kluyvera citrophila*, *Pseudomonas melanogenum* 505.
- synthetic, *Staphylococcus*, antibiotic resistance, methodology 3015.
- thiol broth, inactivation 512.
- Penicillium**, acid phosphatase, alkaline phosphatase, inhibitors production 917.
- antibacterial activity, *Streptomyces variegatus* sp. nov.
- α -hydroxyketopentanes antibiotics 2309.
- antimicrobial activity, nematocides 1325.
- biodegradation, postal stamps paper 3649.
- biodegradation, wool, control, biocides 1288.
- cellulolytic enzymes activity 6871.
- chickens feeds mycoflora, storage conditions effects on 7094.
- classification, association, mycotoxins 1925.
- composts, suppression, damping-off, *Rhizoctonia solani*, *Raphanus sativus* 290.
- contamination, irrigating solution 5869.
- corks contamination, off flavor, wine 1870.
- crop residues biodegradation, *Bacillus polymyxa* symbiosis activity 3673.
- α -cyclodextrin acid production 5370.
- detection, oxidase extracellular enzymes 1799.
- extracellular enzymes, polyamine oxidase, acetyl polyamines oxidation 932.
- fermenters, penicillin production 4044.
- fluoride solubilization, use, decontamination, soil pollution 7258.
- food contamination, cheese, mycotoxins detection, identification 7080.
- food contamination, corn, toxins production, water content, temperature, propionic acid, effects on 2749.
- growth, contamination, taints production, corks, wine 7798.

Penicillium, (continued)

hypersensitive response, seasonal variations, *Pinus ponderosa* 8193.
isolation, identification, *Hordeum vulgare*; grain storage 7197.
marine environment isolates, biodegradation, oil 7310.
mycelia growth, microbeads, fermenters, penicillin production 2270.
mycotoxins, detection, media (culture) 5368.
mycotoxins, levels, Roquefort cheese, Egypt 7058.
pabulin, incidence, *Areca catechu* nuts, India 7087.
penicillin production, fermentation 7434.
post-harvest decay, lemons, disease control 1167.
roquefortine biosynthesis 7888.
rubraloxin B, detection animals feeds, use, thin-layer chromatography, methodology, factors affecting 7054.
single-cell protein production, fermentation, starch residues, food industry 1713.
soil isolates, population dynamics, hydrolase patterns 6319.
soil microorganisms, aluminum phosphate utilization, phosphorus sources 2151.
starter cultures, meat products 7840.
Trichoderma reesei, *Thielavia terrestris*, sporotrichum cellulophilum, cellulase, physicochemical properties, comparison 6006.
viomelien, contamination, *Hordeum vulgare*, nephropathy, pigs 224.

Penicillium acauleatum,
dextranase, biosynthesis, characterization 7741.

Penicillium amidease,
purification, characterization, immobilization, *Escherichia coli* 3512.

Penicillium bilei,
life cycle, spore germination, conidia, soil 8959.

Penicillium brefedianum,
brefeldin A biosynthesis, comparison fatty acids biosynthesis, stereochemistry 8378.

Penicillium brefedianum,
growth, heterotrophy, acid rain effects on, soil 2940.

Penicillium brevicompactum,
ribonuclease (pancreatic), kinetics, structure-activity relationships, substrate specificity 5152.

Penicillium camemberti,
interaction, surfaces microflora, aroma compounds, role ripening, Camembert cheese 6186.

Penicillium caseolicum,
fermentation, soybean milk curd, bromelain coagulants 7852.

Penicillium chrysogenum,
6-aminopenicillanic acid production 4050.
6-aminopenicillanic acid-acyltransferase, purification, kinetics, penicillin G, penicillin V, biosynthesis 3490.
benzylpenicillin production, industrial applications 9171.
conidia, mutagenesis, N-nitrosomethyl buret, penicillin biosynthesis 2268.
immobilized cells, carrageenans supports, penicillin G biosynthesis, nutrient concentrations 4048.
immobilized cells, penicillin fermentation, dissolved oxygen, aeration, fermenters 7435.
mutants, penicillin acyltransferase, cephalosporin C conversion, 7-phenoxyacetamido-cephalosporanic acid 9183.
biosynthetics, glutamine, inhibition 4049.
penicillin fermentation, automated methods, monitoring, fermenters 4833.
penicillin fermentation, fermenters 4832.
penicillin production, computer applications 2269.

Penicillium citrinum,
antifungal activity, structure-activity relationships, *Cassia garrettiana*, wood extracts, *Cassia garrettiana* 7384.
compaction hydroxylation 519.
hyphae staining, fluorescein diacetate, soil 8983.
mycotoxins, feeds contamination, feeding behavior, chickens 7898.
spoilage, coconut 5344.
endonuclease S1 immobilized enzymes, β -(sulfoatoethylsulfonyl) aniline cross-linkage 61.

Penicillium commune,
single-cell protein, mycelia binding, bile acids 7675.

Penicillium coryophilum,
contamination, biodegradation, fuels, heat treatments, control 1296.
growth conditions, meat, food contamination 6193.

Penicillium crustosum,
mycotoxins, food contamination, *Zea mays*, intoxication, cattle 6205.
penitrem A biosynthesis 4471.
penitrem, structure 4469.
penitrens structure 4470.
viomelien, contamination, *Hordeum vulgare*, nephropathy, pigs 224.

Penicillium cyclopium,
zinc culture, glass containers silicone coatings effects on adherence 835.
viomelien, contamination, *Hordeum vulgare*, nephropathy, pigs 224.

Penicillium daleae,
life cycle, spore germination, conidia, soil 8959.

Penicillium digitatum,
antimicrobial activity, urethanes derivatives 1436.
benzimidazoles resistance, post-harvest decay, oranges 2901.
ethylene production, fermentation, use, Citrus wastes 973.
green mold, post-harvest decay, cross-resistance, guazatine, benomyl 2200.
green mold, post-harvest decay, oranges, disease control, fungicides 5470.
post-harvest decay control, phosethyl Al treatment, fruits 2050.
post-harvest decay, lemons, disease control 1167.
post-harvest decay, oranges, sec-butylamine derivatives control 2821.
post-harvest decay, suppression phenylalanine ammonia-lyase activity, grapefruits 2048.

Penicillium diversum,
 α -diversonic acid, β -diversonic acid, structure, biosynthesis 3421.

Penicillium dupontii,
proteinase, immobilized enzymes, proteins hydrolysis, crop residues, mathematical models, bioreactors 3475.

Penicillium expansum,
post-harvest decay, calcium, treatment, apples, effects on 3850.

Penicillium frequentans,
lipids production, whey, nutrient sources 7788.

Penicillium funiculosum,
cellulase, hydrolysis, lignocelluloses 3484.
extracellular β -D-glucosidase production liquid culture 919.
 β -D-glucosidase, α -endo-1,3- β -D-xylanase, immobilized enzymes, kinetics,

Penicillium funiculosum, (continued)

polymers solubility 5134.
 β -D-glucosidase hydrolysis cellulose 877.
infection, *Ananas comosus*, factors affecting pathogenesis 8834.
U.V. radiation, mutagenesis, cellulase production, nutrient requirements 8532.

Penicillium islandicum,
production, islanic acid, effects on Yoshida sarcoma cells growth, phage M2 DNA transfection 9120.

Penicillium italicum,
benzimidazoles resistance, post-harvest decay, oranges 2901.
post-harvest decay, lemons, disease control 1167.
post-harvest decay, oranges susceptibility, ethylene treatment 3853.
resistance, antifungal activity, dicarboximides 8296.

Penicillium janthinellum,
antioxidants production, structure, fermentation 4397.
 α -D-galactosidase, purification, characterization 7750.

Penicillium meleagrinum,
isolation, meleagrin, 9-O- β -bromobenzoylemeleagrin, X-ray crystallography 8375.

Penicillium multicolor,
 β -D-galactosidase, purification, characterization 2616.

Penicillium nigricans,
mycotoxins biosynthesis, fermentation methodology 7043.

Penicillium notatum,
lyso-phospholipase isoenzymes, C.D., fluorescence 7685.

Penicillium oxalicum,
antifungal activity, 1-(hydroxymethyl)-2,1-benzisoxazol-3(1H)-one analogs 9140.
infection, *Solanaceae*, oxalic acid levels 6281.
polygalacturonase isoenzymes, pectin lyase, isolation, purification, chromatography, isoelectric focusing 7720.
seed treatments, biological control, *Pythium ultimum*, damping-off, seed rot, *Cicer arietinum* 8114.

Penicillium patulum,
griseofulvin production, industrial applications 9171.

Penicillium roqueforti,
milk products, use, cheese, production 2734.
triacylglycerol lipase, purification, characterization, pH effects on 24.

Penicillium rugulosum,
fermenters, saponins extracts, saponins purification, *Ficaria ranunculoides* 5222.

Penicillium stecklii,
cell walls degradation enzymes, cocoa beans biodegradation association 2823.

Penicillium urticae,
immobilized cells, patulin production, nitrogen sources 2757.
immobilized cells, proteins contents, methodology 5931.
patulin biosynthesis, manganese, nutrient requirements, media (culture) 5796.

Penicillium variable,
biodegradation, rubber polymers 3462.

Penicillium viridicatum,
barley contamination, production, ochratoxin A, citrinin 5375.
viomelien, contamination, *Hordeum vulgare*, nephropathy, pigs 224.

Penicillium vitale,
glucose oxidase, immobilization, effects on activity, stability 7743.

Penicillioic acids,
mass spectroscopy 4831.

Penitrem,
structure, *Penicillium crustosum* 4469.

Penitrem A,
biosynthesis, *Penicillium crustosum* 4471.

Penitrens,
structure, *Penicillium crustosum* 4470.

Penisietum,
nitrogen fixation, inoculation, *Azospirillum brasilense* 5661.

Penisietum americanum,
disease resistance plant breeding, phytopathogenic fungi 8894.
downy mildew, host-pathogen interactions, *Sclerospora graminicola*, geographical variations 5431.
downy mildew, host-pathogen interactions, strains compatibility, sexual reproduction, geographical variations, *Sclerospora graminicola* 7973.
downy mildew, *Sclerospora graminicola*, disease control, foliar applications, metalaxyl 8137.
ergot, *Claviceps fusiformis*, morphology, pathogenesis 3829.
ergot, disease control, pollen management 1990.
plant diseases, guinea grass mosaic virus, etiology, Ivory Coast 4512.
rhizoplane, *Azospirillum brasilense*, immunoperoxidase test labelling 1275.

Penisietum clandestinum,
plant breeding, disease resistance, yellows 294.
rhizosphere, nitrogenase activity, nitrogen-fixing bacteria, environmental factors 9018.

Penisietum kiphodes,
downy mildew, *Sclerospora graminicola*, host-pathogen interactions, pathogenicity, isolates comparison, Africa, Asia 2796.

Penisietum typhoides,
Claviceps microcephala ergotism incidence, atmospheric conditions effects on 5427.

Penisietum typhodelum,
yield, *Azospirillum brasilense*, nitrogen fixation, inoculation 2963.

Pentachlorophenol,
biodegradation, bacteria, role, wastewater treatment 1035.
biodegradation, industrial wastes, bacteria, fungi 3677.
containing synthetic wastes, activated sludge waste treatment, use, *Arthrobacter* 559.
industrial effluents, wastewater treatment 558.
wood preservatives, inhibition decay fungi, buildings 7242.

2,3-Pentanedione,
flavor compounds, biosynthesis, isoleucine-valine operon, gene regulation, cloning, *Saccharomyces cerevisiae* 7797.

Penitidone,
+ fludalanine, antibacterial activity 6454.

Pentoses,
conversion, production, acetone, butanol, bacteria 3598.
conversion, 2,3-butanediol production, *Klebsiella pneumoniae* 3597.

Pentoxifylline,
metabolites, detection, extracts, fungi, bacteria, thin-layer chromatography, high-performance liquid chromatography 8433.

Pepper mild mottle virus,
infection, *Capsicum annuum*, pepper mottle virus disease resistance, new records 4566.

Subject Index

- Pepper mottle virus**,
disease resistance, *Capsicum annuum*, pepper mild mottle virus infection, new records 4566.
disease resistance, plant breeding, cultivars, *Capsicum annuum* 8909.
infection, *Capsicum*, identification 8828.
- Peptide antibiotics**,
antibiotic AN-1, production, isolation, characterization, *Streptomyces albus* 4059.
antibiotic AN-7, production, isolation, characterization, *Streptomyces griseocinctus* 4061.
antibiotic TA, *Myxococcus xanthus*, biosynthesis, amino acids precursors 1421.
biosynthesis, production, use, immobilized cells, immobilized enzymes, reviews 1410.
complexes, echinomycin-triostin A, *Streptomyces liverii* 4058.
leucostatin, separation, characterization, *Pseudomonas liliacinus* 3144.
nikomycin biosynthesis, mutants, *Streptomyces tendae* 4065.
purification, characterization, *Lactobacillus acidophilus* 4790.
Streptococcus epidermidis, biosynthesis, purification, biological properties 2258.
synthesis, immobilized enzymes 4795.
- Peptide mapping**,
purification, characterization, glycoaminase, comparison, *Pseudomonas aeruginosa*, *Pseudomonas* 4290.
- Peptide synthesis**,
antimandarin analogs, radioactive labeling, *Amanita phalloides* 7664.
antigens, use antiviral agents 4888.
carboxypeptidase Y immobilized enzymes applications, yeasts 63.
gramicidin A, C.D., N.M.R. 3141.
lactam analogs, toxins, *Alternaria* mail 3736.
 β -lactam antibiotics, analogs 4867.
nikomycin N-terminus, use amino acid synthesis, *Streptomyces tendae* 8377.
proteinase, *Streptomyces cellulosa* 7688.
toxins, *Amanita* viridis 7906.
Vibrio cholerae toxins, toxoids conjugate, antisera production, vaccines 4078.
- Peptides**,
active sites, fatty acid synthetase, amino acid sequence, *Cephalosporium caeruleum*, comparison, *Saccharomyces cerevisiae* 8529.
analogs, antibacterial activity, *Escherichia coli* uptake 2210.
antibiotics, β -lactam antibiotics 6581.
m-fluorophenylalanine containing, transport, antifungal activity, *Candida albicans* 4758.
Mycobacterium paratuberculosis protoplasm, enzyme-linked immunosorbent assay methodology, paratuberculosis diagnosis, cattle 4185.
phytochemicals, antibiotics, antibacterial activity, antifungal activity, structure, *Polymyces marquandii* 8742.
synthetic, antibodies specificity, vaccines, hepatitis B surface antigen 6617.
synthetic, *Corynebacterium diphtheriae* toxins, *Streptococcus*, hepatitis B surface antigen, antibody response, peptides, antibody response, mice 9219.
synthetic, immunogenicity, vaccines production, hepatitis B surface antigen 6609.
synthetic, palmitic acid carriers, antibody response, use vaccines 6588.
synthetic, vaccines, hepatitis B virus 6623.
synthetic, vaccines production, antigenicity, foot-and-mouth disease virus, cattle 6659.
transport, plasma membranes, *Streptococcus cremoris*, proteinase localization, proteolysis, milk 1747.
- Peptidoglycan endopeptidase**,
assays, peptidoglycans biosynthesis, *Escherichia coli* 3538.
- Peptidoglycans**,
biosynthesis, peptidoglycan endopeptidase, assays, *Escherichia coli* 3538.
Clostridium saccharoperbutylacetonicum, cell walls, *Bacillus subtilis*, lytic enzymes, enzyme activity 5994.
primers, biochemistry, streptomycin production, *Streptomyces griseus* 4847.
Staphylococcus aureus, detection, enzyme-linked immunosorbent assay methodology, penicillin administration association 3344.
- Peptidoglycolipide**,
chemical composition, *Pseudomonas aeruginosa* 966.
- Peptidyl dipeptidase A**,
activity, aspergillomycinase A, aspergillomycinase B inhibition, *Aspergillus oryzae* 3734.
benzotriazines inhibition 2306.
- Peptidyl transferase**,
antibacterial activity, sparsomycin analogs, *Escherichia coli* 4740.
- Peptone**,
biodegradation, metabolism, activated sludge 6706.
- Pepto-streptococcus**,
peptidolytic enzymes, isolates 6824.
- Pepto-streptococcus anaerobius**,
hypochlorite + hydrogen peroxide, bactericidal activity, cytotoxicity 6445.
- Peracetic acid**,
bactericidal activity, pH effects on, spores, *Bacillus subtilis* 7550.
disinfection, sewage effluents, enterovirus, rotavirus, phages 6695.
effects on, *Trichoderma viride*, cellulase, hydrolysis, cellulose 188.
synergism, chlorine, disinfection, sewage effluents, poliovirus 1 6694.
- Peracids**,
antiviral activity, viruses inactivation 470.
- Percolation**,
filters, *Subarrhenomys splendens*, role, sewage treatment 1460.
soil microorganisms, decomposition, crop residues, hydraulics effects on *Thyosia*, 7509.
- Pergolide**,
metabolism, fungi, biosynthesis, pergolide sulfide, pergolide sulfone 7117.
- Pergolide sulfone**,
biosynthesis, pergolide metabolism, fungi 7117.
- Pergolide sulfide**,
biosynthesis, pergolide metabolism, fungi 7117.
- Perhydronitryl**,
derivatives, production, *Rhodococcus auris* 7783.
- Periconia circinata**,
phytochemicals, host-pathogen interactions, effects on gene expression, pc locus, *Sorghum* 4519.
- Perileucoptera coffeae**,
biological control, eggs susceptibility, pathogens, *Metarhizium anisopliae* 6910.
- Periodontitis**,
dental plaque, dental hygiene, man 2422.
- Peritonitis**,
disease control, U.V. radiation, decontamination, dialysis, man 6718.
disease control, dialysis, disinfectants, clinical trials, man 6721.
- Permethrin**,
derivatives, toxicity, soil microorganisms, fungi 2174.
toxicity, aldrin synergism, nontarget organisms, *Pythium ultimum*, *Trichoderma viride* 459.
- Peronosclerospora sorghi**,
downy mildew, disease control, *Sorghum bicolor*, *Zea mays*, foliar applications, metalaxyl 8126.
downy mildew, *Sorghum bicolor*, disease control, crop rotation, tillage 1175.
downy mildew, *Sorghum bicolor*, *Zea mays*, disease control, seed treatments, metalaxyl, efsite-AI 8144.
osopores, detection, *Zea mays*, seeds 7964.
- Peronospora hyoscyami**,
cell culture, *Candida utilis* stimulation, growth 2525.
conidia, infectivity, overwintering, blue mold, *Nicotiana tabacum* 8817.
- Peronospora hyoscyami f.sp. tabacina**,
carbon dioxide sensitivity 5522.
- Peronospora manshurica**,
downy mildew, surveys, USA, Iowa, Glycine max 7937.
races, virulence, downy mildew, Glycine max, disease resistance, Rpm gene 1202.
- Peronospora parasitica**,
downy mildew, disease control, seed treatments, *Brassica* 8141.
downy mildew disease resistance, genetic analysis, seedlings, *Brassica campestris* 2855.
downy mildew, disease resistance, plant breeding, germplasm, *Brassica campestris* 8065.
downy mildew, *Raphanus sativus*, disease control, mancozeb 2902.
infection, *Brassica*, pathogenesis, epidemiology 2022.
mancozeb + curatze antifungal activity 2085.
- Peronospora tabacina**,
blue mold, metalaxyl, effects on, *Nicotiana tabacum* 8136.
infection, colonization, *Nicotiana tabacum*, callus 4550.
pathogenesis, inoculum potential, seasonal variations, *Nicotiana tabacum* 4548.
- Peronosporaceae**,
activity, *Capsicum annuum* leaves, *Phytophthora capsici* disease resistance 2844.
activity, incompatibility, *Melampsora lini*, rust, host-pathogen interactions, *Linum usitatissimum* 8046.
+ catalase test, *Legionella pneumophila* identification 5039.
isozymes, *Phaeosorus*, *Rhizoctonia solani* infection pathogenesis effects on 7138.
isozyme purification, characterization, *Phanerochaete chrysosporium* 6861.
isolation, activity, soil 2143.
staining, assays, nitrate reductase, sirohaem containing proteins, *Escherichia coli* 8559.
- Peroxisomes**,
Hansenula polymorpha, enzymes biosynthesis 4276.
- Persea**,
root rot, *Phytophthora cinnamomi*, *Phytophthora parasitica*, biological control, parasitism, *Catenaria anguillulae* 5515.
- Persea americana**,
fruits, ripening, antifungal compounds, *Colletotrichum gloeosporioides* infection 1000.
plant diseases, avocado sunblotch disease viroid, detection, electrophoresis 4525.
root rot, *Phytophthora cinnamomi*, disease control, metalaxyl, efsite-AI, injection 8125.
roots, detection, *Phytophthora cinnamomi*, media (selective) 5932.
roots, plant diseases, metalaxyl, efsite-AI, antifungal activity, *Phytophthora cinnamomi* 8923.
- Persea gratissima**,
fruits, *Colletotrichum gloeosporioides* latent infection, nutrients substrates effects on 7987.
- Persea**,
powdery mildew disease resistance, genetic analysis, *Sphaerotheca pannosa* var. *persicae* 4570.
- Persteril**,
antifungal activity, fungi 4962.
- Pest control**,
Arthrobotrys irregularis, soil properties, pesticide residues effects on, *Meloidogyne* 5218.
Bacillus thuringiensis subsp. *berliner* β -exotoxin, clays, formulations, *Pulicidae* 4398.
Beauveria bassiana, inoculum survival, soil, pupae, *Leptinotarsa deomlineata* 5213.
biological control, *Bacillus thuringiensis*, *Etiella behrii* 2644.
biological control, granulosus virus, field trials, *Cydia pomonella* 4388.
biological control, *Neoplectana carpocapsae* + *Bacillus thuringiensis* subsp. *kurstaki*, *Platyptilia carduactyla* 5216.
biological control, *Nomuraea rileyi*, *Pseudioplia* includes, virulence, temperature, dosage effects on, *Anticarsia gemmatilis* 5212.
biological control, viruses, insects 1844.
efficacy, *Simulium vittatum*, *Bacillus thuringiensis*, USA, Tennessee 6086.
infestation, fruit bodies production, culture, *Basidiomycetes* 7855.
integrated control, vectors 7648.
Megastelia halterata, invasiveness, *Basidiomycetes* 8109.
Nephotettix virescens, vectors, carbaryl formulations, *Oryza sativa* 6295.
Nomuraea rileyi, epizootology, *Platyptenia scabra*, *Anticarsia gemmatilis*, *Pseudioplia* includes 5214.
Oryza fustiana, use, granulosus virus, *Cydia pomonella*, isolates 6892.
seeds, oils, *Annona squamosa*, *Azadirachta indica*, *Nephotettix virescens*, vectors, rice tungro virus, *Oryza sativa* 6299.
- Pestalotia subcuticularia**,
antifungal activity, leaves resins, *Hymenaea*, *Copaifera* 5506.
- Pestalotiopsis**,
canker, *Rubus*, USA, Ohio 8846.
- Pestalotiopsis palmarum**,
fruit rot, post-harvest decay 8876.
- Pestalotiopsis versicolor**,
cellulase biosynthesis 13.
- Pesticide applications**,
antimicrobial activity, books 9340.
disease control, plant diseases, phytopathogenic fungi, Glycine max, association rainfall 1220.
- Pesticide pollution**,
2-4-D, soil microorganisms, electron transport chain 412.
soil pollution, carbaryl, fensulfothion, biodegradation, bacteria 2173.
- Pesticide residues**,
biodegradation, *Saccharomyces cerevisiae*, association, fermentation 990.

Pesticide residues, (continued)

effects on *Arthrobacter irregularis*, pest control, *Meloidogyne* 5218.
fungicides, musts, fermentation, proteolysis, *Borytritis cinerea* 3601.

Pesticide resistance

Sclerotium cepivorum, iprodione, vinclozolin, myclozolin, dicloran, quinotozene 5529.

Pesticides

antibacterial activity, *Rhizobium* 1324.
biodegradation, microorganisms enzymes, reviews 1019.
effects on fungi biodegradation, litter filter 2097.
effects on, *Rhizobium japonicum* growth, fungi pathogens, Glycine max 1212.
effects on, soil microorganisms, soil, measuring techniques, reviews 4673.
-nuclear polyhedrosis virus, *Bacillus thuringiensis*, integrated control, *Heliothis virescens* 135.
pesticide applications, antimicrobial activity, toxicology, nomenclature, chemical analysis, books 9340.
removal, activated sludge 4086.
toxicity, nontarget organisms, soil microorganisms 5680.

Pesticides (organochlorine)

biodegradation, bacteria 1014.
synergism, atrazine, permethrin, nontarget organisms, *Pythium ultimum*, *Trichoderma viride* 459.
Petioles,
tissue culture, antiviral activity, ribavirin, potato virus Y, tobacco mosaic virus, cucumber mosaic virus, *Nicotiana tabacum* 3904.

Petite mutant

Saccharomyces, ethanol fermentation 6127.

Petri dishes

antibiotic sensitivity testing, bacteria, factors affecting disc-diffusion test 2245.

Petroleum

biodegradation, *Acinetobacter calcoaceticus* var. *anitratus* 3985.
biodegradation, *Acinetobacter calcoaceticus* var. *anitratus* 4682.
biodegradation, microorganisms, reviews 8287.
biodegradation, reviews, soil microorganisms 8285.
biodegradation, soil microflora 3987.
books, pollution effects, microorganisms 8497.
fermentation, single-cell protein production, yeasts 5960.
photooxidation, toxicity, marine bacteria 6864.
recovery, use surfactants, production, *Bacillus licheniformis* 5265.
sulfur compounds, biodegradation, *Desulfovibrio* 8274.
wastewater treatment, industrial effluents, oil and gas industry, reviews 8403.

Pezizales

ecological distribution, habitat, soil pH, *Greenland* 2128.

pH

antibiotics biosynthesis, microorganisms 2246.
effects on β -D-fructofuranosidase, sucrose hydrolysis, kinetics, soil 6332.
effects on activity, pectinolytic enzymes, *Clostridium pectinofragmentans* 7737.
effects on, antimicrobial activity, antimicrobial agents 1359.
effects on *Aspergillus parasiticus* aflatoxins biosynthesis, in vitro 7067.
effects on, *Bacillus macerans*, glucose, fermentation, products 2690.
effects on bactericidal activity, gram-positive bacteria, gram-negative bacteria, albumen, eggs, chickens 4010.
effects on caseinolytic enzymes, *Kluyveromyces lactis* 22.
effects on, cellulose hydrolysis, cellulase, soil isolates, *Bacillus* 7682.
effects on, ciprofloxacin, antibacterial activity, *Bacteroides fragilis*, *Clostridium* 4733.
effects on cytokinins biosynthesis, rhizosphere microorganisms, *Pinus sylvestris* 8181.
effects on dehydrogenase activity, soil 8988.
effects on detergents antibacterial activity, *Escherichia coli* 9264.
effects on digestion (anaerobic), sewage sludge 2352.
effects on disinfection, chloramines 9246.
effects on, enzymes, activity, physicochemical properties, microorganisms, surveys, industries 58.
effects on exo-1,4- β -D-xylosidase activity, substrate specificity, *Aspergillus niger* 7725.
effects on *Gliomys fascicularis*, roots colonization, phosphorus nutrient uptake, *Chrysanthemum morifolium* 5642.
effects on heavy metals inhibition alcohol dehydrogenase, mechanisms, yeasts 7600.
effects on hydrolysis substrates, β -lactamase, kinetics, *Esacillus cereus* 4278.
effects on, *Mycoplasma gallisepticum*, *Mycoplasma synoviae*, antigens, yields 5022.
effects on, *Nitrosomonas europaea*, nitrous oxide, production, soil 7274.
effects on pectinolytic enzymes production, continuous culture, *Aspergillus niger* 8601.
effects on peracetic acid bactericidal activity, spores, *Bacillus subtilis* 7550.
effects on spoilage, yeasts, confectionery 8598.
effects on spore germination, *Clostridium botulinum* 1899.
effects on, triacylglycerol lipase, *Penicillium roqueforti* 24.
effects on tyrosin stability 7455.
effects on virginiamycin binding ribosomes 8376.
effects on wastewater treatment, industrial effluents, meat industry, anaerobic conditions, bioreactors 3196.
effects on 2-methoxy-1,4-benzoquinone biosynthesis, vanillic acid metabolism, *Aspergillus* activity 8644.
films, denitrification, rotating discs, wastewater treatment 2356.
inhibition, *Rhizobium* growth rate, isolates, *Arachis hypogaea* 2170.
levels, continuous culture, growth, *Saccharomyces cerevisiae* 5085.
measuring techniques, digestion (anaerobic) 6666.
proline hydroxylation, *Streptomyces griseoviridis* 5109.
propolis, *Acer pseudoplatanus*, fusilicocin effects on 7110.
relationship odor intensity, acinomyces, fungi, microbial pollution, reservoirs 3212.
role, carbenicillin, suberlinicillin, hydrolysis, β -lactamase, *Bacillus cereus* 4277.
role, monophenol monooxygenase isoenzymes activation, *Aspergillus oryzae* 6041.
role, *Sclerotinia sclerotiorum* pathogenesis, virulence, *Helianthus annuus* 2010.
rumen microorganisms continuous culture, fermentation 5295.
savannahs soil, urea fertilizers, sulfur coatings 8256.
stability, phosphogluconate dehydrogenase, comparison *Bacillus stearothermophilus*, yeasts 73.
Staphylococcus aureus growth, cheese 6960.
urine, effects on gentamicin antibacterial activity, *Escherichia coli*, *Pseudomonas aeruginosa* 3108.

pH, (continued)

water, detection, fungal flora, Glycine max seeds 289.

Phacidium infestans

snow blight, *Pinus sylvestris*, association nutrient dynamics 5601.

Phadebact test

agglutination, identification clinical isolates, *Streptococcus pneumoniae* 8465.
agglutination, serotyping, *Haemophilus influenzae* 5066.
agglutination, *Streptococcus* group B 752.
cerebrospinal fluid, diagnosis, bacteria meningitis, man 3321.
comparison, latex agglutination, detection, *Haemophilus influenzae* type b, antigens, cerebrospinal fluid 795.
identification, *Streptococcus pneumoniae* 684.

Phaeocryptopus gaeumannii

needlecast, *Pseudotsuga menziesii*, effects on harvesting leaves dehydration, retention 3911.

Phaeolus schweinitzii

infection, disease resistance, *Coniferalea callus* culture 2826.

Phaeolus vulgaris

rust, *Uromyces phaseoli* var. *typica*, *Uromyces phaseoli* var. *vignae*, chitin assays, histopathology 1967.

Phaeosporia

leafspot, *Eucalyptus*, incidence, greenhouses 8942.

Phaeosphaeria typharum

biomass, measuring techniques, glucosamines levels 6791.

Phaffia rhodozyma

autolysis, astaxanthin extraction 5225.
+ *Bacillus* circularis mixed culture, carbon sources, lytic enzymes activity relationship astaxanthin extraction 1743.

Phase 1

acacinomycin A, inactivation, characterization 1351.
cloning vectors 627.
Escherichia coli DNA hybrids, environmental factors mutagenicity testing 3330.
lysogenization, bacteria resistance, isolation methodology 5910.
plaques, use, screening, antigens 624.
replication inhibition, ammonia, heterocyclic derivatives, DNA binding, *Escherichia coli* 4030.

Phase B2

infection, starter cultures, sausages fermented food, *Lactobacillus plantarum* 5334.

Phase c2

resistance, plasmid pNP40, *Streptococcus lactis* subsp. *diacetylactis*, dairy starters 2196.

Phase fr1

infection, starter cultures, fermented food, sausages, *Lactobacillus plantarum* 5333.

Phase f2

U.V. radiation disinfection, kinetics models, water 568.

Phase M13

cloning vectors 626.

Phase M2

DNA transfection, *Penicillium islandicum* islandic acid effects on 9120.

Phase O1

use, *Salmonella* detection methodology, milk samples 1573.

Phase PL-1

induction lysogeny, purification, characterization, *Lactobacillus casei* 4264.

Phase P22

mutagenicity testing, *Salmonella typhimurium*, acridine, benzo(f)quinoline, combustion products 3331.

Phase typing

Bacillus sphaericus, pathogenicity, biological control, larvae, *Culex quinquefasciatus* 2683.
epidemiology markers, *Staphylococcus aureus* 6782.
identification, bacteria, plant diseases 3770.
identification, *Yersinia* 694.
Salmonella typhimurium, plasmids analysis, drug resistance patterns, clinical isolates 4690.
Staphylococcus aureus, enterotoxins production, serotyping, clinics, foods 4479.
Phase T2,
inactivation, free radicals, superoxide, hydroxide, non-steroidal antiinflammatory drugs 4769.

Phase T4

DNA, gene 32 protein binding, trichloroethanol chemical modification, tryptophan residues, role 4258.

lysogeny, disaccharides tetrapeptides binding effects on tryptophan residues, fluorescence 7706.

polynucleotides, gene 32 protein binding, tryptophan residues role 4255.

polynucleotide synthetase(ATP), isolation, purification 4338.

polynucleotide synthetase(ATP), purification, characterization 6003.

polynucleotide synthetase(ATP), purification, use oligodeoxynucleotides synthesis 621.

polynucleotide synthetase(ATP), use oligonucleotides synthesis 622.

thioredoxin, protein structure, tertiary structure, homology, glutaredoxin 7666.

Phase T4D

lysis, *Escherichia coli*, contamination, petroleum recovery, rocks 3996.

Phase T7

DNA, recombination, cell-free system, methodology 648.

Phase X174

acacinomycin A, inactivation, characterization 1351.

Phase 646 (ML8)

replication, dairy starters, Cheddar cheese production, *Streptococcus lactis* 4456.

Phages

bacteria, antimicrobial testing, environmental factors, books, conferences 3388.
cloning vectors, DNA integration methodology 628.
coliforms, indicator species, water quality, water pollution, sewage treatment 4943.
concentration, membrane filtration, chromatography, measuring techniques, water, methodology 5850.
contamination, dairy starters, milk phosphate effects on, *Lactobacillus bulgaricus* 3716.
contamination, dairy starters, *Streptococcus* group N, *Leuconostoc*, reviews 210.
detection, drinking water, flocculation, concentration 8413.
disinfection, peracetic acid, sewage effluents 6695.
enumeration methodology, sewage 8420.
Escherichia coli, cryopreservation, inactivation factors 1550.

Phages, (continued)

- Escherichia coli*, plaque assay, methodology, detection, water 2403.
inactivation, sunlight, sea water 2402.
indicator species, inactivation, waste water, marine environment 1499.
infected *Pseudomonas aeruginosa*, polymyxin B induction lysis 4856.
infection, dairy starters, isolation, characterization, *Streptococcus lactis* subsp. *lactis* 5337.
lysis, DNA homology, prophages, dairy starters, *Streptococcus cremoris* 5335.
production, fermenters, cloning vectors preparation, *Rhizobium meliloti* 4997.
removal, kinetics, filters, anaerobic conditions, wastewater treatment 1474.
RNA polymerase isolation, kinetics, substrate specificity 59.
role, plasmids spread, *Staphylococcus* drug resistance 9070.
ultrafiltration isolation, water reclamation 2396.
use, detection, speck, *Lysopecton esculentum* 8823.
use, pollution indicators, association, enterovirus microbial pollution, drinking water 8425.
use, *Rhizobium leguminosarum* var. *trifolii* eradication, *Trifolium repens* protoplasts 8858.
water, enumeration methodology, bacteria hosts adsorption 2408.

Phagocytes,

- ritamycin transport, antibacterial activity, *Staphylococcus* 7449.

Phagocytosis,

- Cryptococcus neoformans*, staining, (4',6'-diamidino-2-phenylindole)-fluorochrome, microscopy 2524.
leukocytes (polymorphonuclear), *Staphylococcus*, fibronectin interactions, clindamycin effects on 514.
leukocytes, *Staphylococcus aureus* killing, ansamycin antibacterial activity relationship 2296.
Staphylococcus aureus, ritamycin interaction, leukocytes 7450.
streptogramin, chloramphenicol containing liposomes, antibacterial activity, *Escherichia coli* infected macrophages 513.
viability, *Staphylococcus aureus*, antibiotics, antibacterial activity, phenometry, methodology 6771.

Phagostimulants,

- synergism, pathogenicity, *Bacillus thuringiensis* var. *entomocidus*, *Spodoptera littoralis*, biological control 131.

Phakopsora pachyrhizi,

- rust, Glycine max, disease spread, pathogenicity, association, economics 7944.
rust, host range, host alternation, disease reservoirs, *Leguminosae* 7940.

Phallices,

- L-idurono-D-glucuronan, structure 5202.
Phallic acid,
L-idurono-D-glucuronan, structure, Phallales 5202.

Phalloidin,

- fluorimetry, *Amanita subulbacea* 5366.
thioesters cross-linking, conformation, N.M.R., C.D., *Amanita phalloides* 3755.

Phallotoxins,

- reviews 2759.

Phallus impudicus,

- soil, mycelia growth, development 401.

Phalarinthea crotalariae,

- leafspot, *Eichhornia crassipes* 8818.

Phanerochaete chrysosporium,

- biodegradation pathway, arylglycerol- β -aryl ethers, lignin 2712.
biodegradation, *Triticum aestivum* lignocelluloses 6943.
biodegradation, 3-(4'-ethoxy-3'-methoxyphenyl)-2-(4'-methoxyphenyl)propionic acid, association, lignin, metabolism 3662.
+ *Candida utilis*, mixed culture, single-cell protein production, fermentation, straw, *Triticum aestivum* 1710.
growth patterns, lignin biodegradation 179.
lignin, biodegradation 1884.
lignin biodegradation, depolymerization, respiration 7817.
lignin biodegradation mechanisms 4442.
lignin biodegradation, oxygen incorporation 4431.
lignin biodegradation, oxygenase, purification, characterization 6011.
lignin degradation enzymes, purification, characterization 3452.
mycelia, hydrogen peroxide production, fatty acyl-CoA oxidase activity, lignin biodegradation 3476.
peroxidase isoenzymes, purification, characterization 6861.
white rot, detritus effects on pathogenesis, *Cynodon dactylon*, *Eremochloa ophiuroides*, *Poa pratensis*, *Stenotaphrum secundatum* 8785.

Phanerochaete velutina,

- soil, mycelia growth, development 401.

Phanquinone,

- antibacterial activity, stimulation, secretions, pancreas, duodenum, man 9088.

Pharmaceuticals,

- biodegradation, *Fusarium*, reviews 6956.
contamination, microorganisms, nosocomial environments, reviews 9149.
industries, microorganisms contamination 9147.
microorganisms, contamination, production, antibiotics, antimicrobial agents, antimicrobial activity, books 9343.
microorganisms contamination, reviews 9148.
preservatives, antimicrobial activity 1366.
production, microorganisms, genetic engineering 8652.
production, reviews, bacteria, fungi 8851.
quality control, reviews 9150.
sterilization, fungi, viruses 9144.
sterilization quality control 9146.
sterilization, reviews 9145.
syrops, microorganisms analysis 4136.
use secondary metabolites, microorganisms, reviews 965.
veterinary medicine, sterility testing, membrane filtration, viruses 7395.
- Pharmacology,**
antibiotics, drugs, antimicrobial activity, clinical trials, pharmacokinetics, pediatrics, reviews 5942.
antitubercular agents, reviews 5725.

Phaseolotoxin,

- production, *Pseudomonas syringae* pv. *phaseolicola* 2763.

Phaseolus,

- detection *Aspergillus parasiticus* aflatoxins food contamination, use, chromatography methodology 7088.
Rhizoctonia solani infection, effects on peroxidase isoenzymes 7138.

Phaseolus aureus,

- phytoalexins, antifungal activity, *Cladosporium cucumerinum* 5520.
plant diseases, yellow mosaic virus, disease control, vectors, Aleyrodidae 3878.
root, *Cylindrocephalum* 5409.

Phaseolus limensis,

- plant diseases, viruses, etiology, pathology 8775.

Phaseolus lunatus,

- cowpea mosaic virus, incidence, vectors, *Bemisia tabaci*, population density, seasonal variations 3783.

Phaseolus mungo,

- planting density, time, effects on, leafspot, *Cercospora canescens*, pathogenesis 7929.

Phaseolus schweinitzii,

- roots, plant diseases, + *Cronartium ribicola* blister rust, association, dendroctonus ponderosae, *Pityogenes fessifrons*, *Pinus monticola*, USA, Idaho 8182.

Phaseolus vulgaris,

- Basidiomycetes plant diseases, pathogenesis 1111.
beans, *Lactobacillus cellobiosus* fermentation, mannitol biodegradation, *Lactobacillus plantarum* 7003.
cell walls, *Pseudomonas phaseolica* cell adhesion, extracellular polymers, polysaccharides 2785.
clover yellow vein virus infection, pathogenesis 6226.
Colletotrichum lindemuthianum anthracnose, pathogenicity 1122.
cotton leaf crumple disease, virus-like particles etiology, epidemics, USA, Arizona 8814.
cultivars, disease resistance, bean yellow mosaic virus 1208.
cultivars, nitrogen sources, effects on nitrogen fixation, *Rhizobium leguminosarum* var. *phaseoli* 8250.
cultivars, *Rhizobium leguminosarum* var. *phaseoli* nodulation, nitrogen fixation 9021.
disease resistance, clover yellow vein virus infection, inoculation methodology effects on 8103.
disease resistance, halo blight, *Pseudomonas syringae* pv. *phaseolicola* 5406.
disease resistance, plant breeding, *Uromyces phaseoli* rust 3857.
disease resistance, *Rhizoctonia solani*, role, cuticle 1174.
disease resistance, *Rhizoctonia solani* root rot, genetic control, inheritance 2069.
disease resistance, rust, *Uromyces phaseoli*, races virulence 2846.
gray mold, *Botrytis cinerea*, pathogenesis association developmental stages, environmental effects 1114.
halo blight disease resistance genes, plant breeding 5481.
host-pathogen interactions, organelles, *Colletotrichum lindemuthianum* 7142.
hypocotyls, cell adhesion, *Colletotrichum lindemuthianum*, spores 3796.
infection, *Colletotrichum lindemuthianum*, pectin lyase production 5185.
inheritance, disease resistance, rust, *Uromyces appendiculatus* 2850.
inoculation, *Rhizobium leguminosarum* var. *phaseoli*, nodulation 6376.
leaves, lesions, alfalfa mosaic virus 8857.
leaves lesions, *Xanthomonas campestris* var. *phaseoli*, hydrogen fluoride effects on 7133.

- mixed infection, tobacco mosaic virus + bean golden mosaic virus, pathogenesis 244.
nitrogen fixation, aging effects on *Rhizobium* 6361.

- nitrogen fixation, energy balance, cultivars strains interaction, *Rhizobium leguminosarum* var. *phaseoli* 8238.

- nitrogen fixation, *Rhizobium leguminosarum* var. *phaseoli*, strains variability 8249.

- nitrogen fixation, *Rhizobium*, phosphorus effects on 7286.
nodulation, *Rhizobium* inoculum 2161.

- phyloplane electrical properties, phytopathogenic fungi spores discharges 7143.
phyloplane electrical properties, phytopathogenic fungi spores discharges 7925.
phytopathogenic fungi incidence, fungicides efficacy 2086.

- Rhizobium leguminosarum* var. *phaseoli* nodulation, *Pseudomonas putida* effects on 5658.

- Rhizobium solani* root rot, herbicides effects on 1181.
rhizosphere microorganisms, soil microorganisms, population levels 8990.

- root rot, *Pythium* etiology, USA, Wisconsin 7939.
root rot, *Pythium*, *Fusarium*, effects on N-(phosphonomethyl)glycine activity 7943.

- rusts, *Rhizobium leguminosarum* var. *phaseoli* inoculation, growth, flowering 4506.
rust, disease resistance, cultivars comparison, sporulation incidence 8082.

- rust, *Uromyces phaseoli*, haustoria inhibition, triphenylphosphite 2899.
seeds, *Cercospora canescens*, seed-borne fungi, detection methodology 1676.

- soil moisture, roots density, effects on, *Fusarium solani* f.sp. *phaseoli*, infection 3782.

- soil-borne diseases, *Pythium*, *Rhizoctonia solani*, disease control, agricultural practices comparison fungicides 1210.

- symptoms, inheritance, *Xanthomonas campestris* pv. *phaseoli* blight 4501.
tobacco mosaic virus infection disease resistance, relationship, leaves sucrose content, light 8886.

- tobacco mosaic virus infectivity, *Tritrachium* alkaline proteinase inhibition 2806.

- Uromyces phaseoli* rust, association, chloroplast ultrastructure, chlorophyll levels 2775.

- web blight, *Uromyces appendiculatus*, monokaryons, comparison, dikaryons 2780.
white mold, *Rhizoctonia microsclerotia*, genotypes, disease resistance 8060.

- white mold, canopies effects on disease control, *Sclerotinia sclerotiorum* 7330.

- Phelia gigantea,**
white rot, detritus effects on pathogenesis, *Cynodon dactylon*, *Eremochloa ophiuroides*, *Poa pratensis*, *Stenotaphrum secundatum* 8785.

- Phellinus noxius,**
root rot, *Hevea brasiliensis*, pathogenesis 2920.

- root, *Delonix regia* 5590.

- Phellinus punctatus,**
incidence, plants, USA, North Dakota 3838.

- Phellinus weirii,**
infection, *Pseudotsuga menziesii*, growth reduction determination 3923.

- Phenanthrops,**
effects on levels, activity, bacteria, algae, soil, leaf litter 9025.

- Phenanthrene,**
biodegradation, marine environment isolates, *Penicillium*, yeasts 7310.

- biodegradation, *Micrococcus* 1294.
stereoselectivity, oxidation, *Cunninghamella elegans* 2188.

- biodegradation, reviews 8278.

- Phenazines,**
biodegradation, *Pseudomonas aureofaciens* 2716.

- Phenethyl alcohol,**
production, L-phenylalanine conversion, cheese ripening, yeasts, bacteria 6993.

- Phenethyl alcohol, (continued)**
Saccharomyces cerevisiae sensitivity, amino acids auxotrophs 3062.
- Phenmediphan,**
herbicides, nitrification, soil 9026.
- Phenol,**
biodegradation enzymes, Alcaligenes eutrophus 4422.
biodegradation, kinetics, activated sludge 6674.
biodegradation, soil microorganisms 2141.
effects on Aspergillus flavus aflatoxin B1 biosynthesis, in vitro 7095.
inhibition activated sludge, wastewater treatment, models 552.
inhibition methanogenesis, digestion (anaerobic), wastewater treatment 4680.
inhibition oxygen consumption, monitoring, computer applications, activated sludge 6703.
renewal, carbon (activated) adsorption, biodegradation, water treatment, Arthrobacter 7500.
- Phenolic acids,**
levels, Arachis hypogaea leaves, association rust 8771.
- Phenols,**
bark, levels, Nectria coccinea var. faginata, host-pathogen interactions, Fagus grandifolia 8188.
biodegradation, industrial effluents isolates, Acinetobacter, Fusarium flocculenum 8685.
biosynthesis, Verticillium liquid culture 972.
Cicer arietinum, levels, Rhizoctonia bataticola infection 1975.
derivatives, biodegradation, acclimatization, activated sludge 5829.
derivatives, physicochemical derivatives, antimicrobial activity, bacteria, fungi 1353.
disinfection 1508.
extraction, wastewater treatment, monophenol monooxygenase, Agricus bisporus 5846.
industrial effluents, wastewater treatment, aeration 4902.
inhibition, Abies balsamea soil nitrification, sub-alpine environments 2908.
levels, Ribus, Didymella applanata infection 5454.
removal, oxidative metabolism, wastewater treatment, activated sludge 5847.
water pollution, pollution effects, biodegradation, aquatic microorganisms 5812.
- β -Phenoxy-ethyl-dimethyl-dodecyl-ammonium bromide,**
antibacterial activity 5463.
- 7-Phenoxyacetyl- α -cephalosporanic acid,**
cephalosporin C conversion, penicillin acyltransferase, mutants, Penicillium chrysogenum 9183.
- Phenoxycetic acid,**
chlorine derivatives, hydrophobicity, structure-activity relationships, Pseudomonas putida 1882.
- Phenyl carbonic acids**
flavor, temperature effects on, wort fermentation, beer 2682.
- N-Phenyl-N'-aryl thioureas,**
derivatives, structure-activity relationships, disease control, potato virus X, Nicotiana tabacum 4592.
- 3-Phenyl-prop-2-yn-1-ol,**
synthesis, antifungal activity, phytopathogenic fungi 3059.
- 1-Phenyl-3-methyl-4-(α -enoladiazolyl-phenylhydrazo)- Δ^2 -pyrazolin-5-one,**
antibacterial activity, dyes 9131.
- 1-Phenyl-3-methyl-4-(α -enoladiazolyl-phenylhydrazo)- Δ^2 -pyrazolin-5-one,**
antibacterial activity, antifungal activity 9131.
- 2-Phenyl-4H-benzo[b]thiopyran-4-ones,**
synthesis, antibacterial activity, antifungal activity 4780.
- Phenylacetic acid,**
anaerobic bacteria, biosynthesis 855.
- 4'-Phenylacetyl-deltamethrin,**
deoxidation, products antibacterial activity 5789.
- Phenylalanine,**
conversion, L-tyrosine, immobilized cells, Pseudomonas 875.
Flavobacterium, biosynthesis 1701.
role, Bacillus brevis, gramicidin S, biosynthesis 8381.
- L-Phenylalanine,**
assays, use L-phenylalanine oxidase, methodology, Pseudomonas 5150.
conversion, phenethyl alcohol production, cheese ripening, yeasts, bacteria 6993.
- Phenylalanine ammonia lyase,**
Rhodotorula glutinis, activity induction, stabilization 37.
- Phenylalanine ammonia-lyase,**
activity, suppression, Penicillium digitatum, post-harvest decay, grapefruits 20048.
- L-Phenylalanine oxidase,**
use, L-phenylalanine assays, methodology, Pseudomonas 5150.
- Phenylalanyl-tRNA synthetase,**
carbohydrate composition, comparison cytoplasm, mitochondria, Saccharomyces cerevisiae 930.
purification, characterization, electrophoresis, Escherichia coli 5995.
- 6-(Phenylamino)methyl-2,4-quinazolinediarnines,**
antibacterial activity 8304.
- 1-Phenylethanol,**
biodegradation, plasmids, Pseudomonas fluorescens 4425.
- Phenylethylautonyl fluoride,**
dyes, inhibition serine proteinase, Streptomyces nutgensensis 2584.
- O-Phenylphenol,**
biodegradation, activated sludge, rivers, aquatic microorganisms 7836.
disease control, post-harvest decay, fungi, apples 8052.
- 6-Phenylselenenyl-penicillanates,**
synthesis, stereoselectivity 6535.
- 3-Phenylthiopropionamide,**
conversion, β -lactam antibiotics, models, penicillin biosynthesis 6529.
- Phialophora lagerbergii,**
scytalone biosynthesis, acetic acid radioactive labeling 7785.
- Phialophora,**
biodegradation, forest products, colonization, succession, preservatives, effects on 1241.
biological control, Gaumannomyces graminis var. tritici, take-all, Triticum aestivum 5512.
- Phialophora graminicola,**
Fusarium blight, Poa pratensis, association 5418.
- Phialophora hoffmannii,**
soft rot, biodegradation, wood, cinemicrography 1245.
- Phialophora radicola,**
incidence, Gramineae roots 2786.
- Phialophora zeicola sp. nov.,**
role, Zea mays root rot, stalk rot, South Africa 284.
- Phialodelphus coronarius,**
flower blight, leafspot, Pseudomonas syringae 1160.
- Philiostigma thoningii,**
oxidation, Rhizobium 4667.
- Phleum pratense,**
silage, proteolysis 1068.
- Phloem,**
Eucalyptus marginata, Phytophthora cinnamomi infection, stems lesions development 3842.
mycoplasma-like organisms, little leaf, Vaccinium vitis-idaea, Vaccinium myrtillus 6275.
- Phlox drummondii,**
leafspot etiology, Pleospora drummondii sp. nov., Stemphylium drummondii sp. nov. imperfect state 2039.
- Phoenix**
seeds, carbon sources, citric acid production, Candida lipolytica 873.
- Phoenix dactylifera,**
wine, fermentation, yeasts, lactic acid bacteria, acetic acid bacteria 5288.
- Phoma,**
phenomenon production, phytotoxins 8747.
- Phoma betae,**
antagonism, Bacillus subtilis antibiotics production, Phoma betae, oxafun inhibition, rhizosphere 2139.
betaenone metabolites, isolation, characterization, new records 7115.
infection, Beta vulgaris, Laetisaria arvalis, antagonism, effects on 8032.
infection, seedlings, Beta vulgaris, disease control 8851.
- Phoma destructiva,**
infection, phenomenon detection, high-performance liquid chromatography, Lycopersicon esculentum 8824.
infection, phenomenon formation, Lycopersicon esculentum 8848.
phytochemicals, purification, characterization 8746.
- Phoma exigua,**
gastroplasma tuberosum, disease resistance 2070.
seed rot, Vigna radiata, pectinolytic enzymes, production 397.
- Phoma exigua var. foveata,**
experimental infection, Solanum tuberosum, injection systems 4495.
- Phoma lingam,**
stalk rot, disease control, vinclozolin, Brassica napus 2903.
stalk rot, susceptibility, cultivars, Brassica napus 2814.
- Phoma macdonaldi,**
charcoal rot, Helianthus annuus, etiology 4551.
- Phoma medicaginis,**
black stem, disease resistance, plant breeding, Medicago sativa 4572.
- Phoma minutella,**
infection, Eutoe monosperma 8017.
- Phoma nivea comb. nov.,**
infection, Dalbergia sisoo 8017.
- Phoma sorghina,**
leafspot incidence, Grewia asiatica, India 2034.
- Phoma violacea,**
post-harvest decay, Malus pumila, pathogenicity 2053.
- Phenonone,**
formation, Phoma destructiva infection, Lycopersicon esculentum 8848.
Phoma destructiva infection, detection, high-performance liquid chromatography, Lycopersicon esculentum 8824.
phytochemicals, production, Phoma 8747.
- Phomopsis A,**
mycotoxins, amino acid sequence, N.M.R. use, Phomopsis leptostromiformis 3735.
- Phomopsis,**
asymptomatic infection, plants, taxonomic significance 7129.
infection, seeds, harvesting dates effects on, Glycine max 8778.
robin A, isolation, characterization 7896.
stem canker, Helianthus annuus 7194.
- Phomopsis batatae,**
asymptomatic infection, plants, taxonomic significance 7129.
- Phomopsis leptostromiformis,**
infection, Lupinus, epidemiology, Australia 7926.
mycotoxins, phomopsis A amino acid sequence, N.M.R. use 3735.
- Phomopsis oblonga,**
opportunistic infection, Ulmus 7232.
- Phomopsis phaseoli,**
asymptomatic infection, plants, taxonomic significance 7129.
- Phomopsis sojae,**
asymptomatic infection, plants, taxonomic significance 7129.
- Phony disease,**
bacteria, xylem, Prunus persica, water potential 8879.
- Phorate,**
chemical control, Nephotettix virescens, vectors, rice tungro virus, disease control, Oryza sativa 2072.
- Phoridea,**
infestation, culture, fruit bodies production, Basidiomycetes 7854.
infestation, pest control, fruit bodies production, culture, Basidiomycetes 7855.
- Phosethyl Al,**
cross-resistance, metalaxyl, Phytophthora infestans, Pseudoperonospora cubensis, disease control, Solanum tuberosum, Cucumis sativus 2894.
treatment, Penicillium digitatum post-harvest decay control, fruits 2050.
- Phosphamidon,**
soil microorganisms, effects on fungi 6388.
- Phosphatase,**
activity, composts, Aspergillus awamori, Paecilomyces fusisporus 7491.
activity, Simulium ornatum, biological control, Coelomycidium similis, Pleistophora similis 2646.
activity, soil, Cook Is., Tongan Is. 8225.
activity, soil, measuring techniques 3929.
activity, soil microorganisms 1264.
assays, staining, bacteria 8610.
denaturation, renaturation, electrophoresis, Achleplasma laidlawi 7707.
ectomycorrhizas, role phosphate, nutrient uptake, comparison Basidiomycetes saprophytes, Betula pubescens, Pinus contorta 5575.
production, relationship antibiotic resistance, clinical isolates, gram-negative bacilli 4709.
- Phosphate,**
antimicrobial activity, food, reviews 6981.
availability, soil, Vicia faba residue biodegradation 3668.
buffers, media (culture), effects on, lactic acid bacteria, Streptococcus, antibiotic resistance 5708.

Phosphate, (continued)

- composting, phosphate-dissolving bacteria 6343.
effects on lentoxin biosynthesis, *Alternaria alternata* 5395.
fertilizer applications, effects on soil nitrifying bacteria nitrous oxide production 7283.
fertilizer applications, efficiency, *Pseudomonas striata* seed treatments, *Lens culinaris* 4620.
fertilizers, *Glomus mosseae* vesicular-arbuscular mycorrhizas interaction, effects on Medicago sativa 3946.
+*Glomus fasciculatum*+*Rhizobium*, inoculation, *Vigna unguiculata*, *Cajanus cajan* 2945.
inhibition streptothricin biosynthesis, energy metabolism, *Streptomyces noursei* 7470.
ligands interaction inorganic phosphatase, X-ray scattering, yeasts 3487.
milk, effects on phages contamination, dairy starters, *Lactobacillus bulgaricus* 3716.
nutrient availability, proteinase production, *Pseudomonas fluorescens* 7749.
nutrient flow, vesicular-arbuscular mycorrhizas mycelia, roots, *Arachis pseudoplatanus* 5555.
nutrient uptake, ectomycorrhizas, fertilizer applications stimulation, *Pseudotsuga menziesii* 5574.
nutrient uptake, ectomycorrhizas, phosphatase, comparison, *Basidiomycetes* saprophytes, *Betula pubescens*, *Pinus contorta* 5575.
nutrient uptake, vesicular-arbuscular mycorrhizas, colonization, roots, crops 5620.
nutrient uptake, vesicular-arbuscular mycorrhizas, interaction actinorrhizas nitrogen fixation, *Hippophae rhamnoides* 8243.
nutrient uptake, vesicular-arbuscular mycorrhizas, physiology, colonization, roots, trees 5554.
nutrient uptake, vesicular-arbuscular mycorrhizas, spores levels, soils (sandy), yield, *Anacardium occidentale* 7260.
role, alkaloids biosynthesis, *Claviceps* 3754.
soil amendment, induction vesicular-arbuscular mycorrhizas sporulation, *Paspalum notatum* 2134.
soil amendment, vesicular-arbuscular mycorrhizas infectivity, seasonal variations, *Trifolium subterraneum* 2144.
solubilization, *Pseudomonas striata*, *Aspergillus awamori* 6350.
solubilization, soil, fungi, phosphate-dissolving bacteria 2138.
stimulation, colistin production, *Bacillus polymyxa* 3148.
- Phosphate-dissolving bacteria,**
Photobacter, *Aspergillus awamori*, inoculation, composting 8391.
composting, phosphate 6343.
2,4-dioxohexahydro-1,3,5-triazine inhibition 3970.
phosphate dissolution, rhizosphere microorganisms, *Triticum aestivum*, *Lolium perenne* 7255.
phosphate solubilization, soil 2138.
- Phosphatidyl ethanolamine,**
hydrolysis, *Streptococcus lactis* fractions 1895.
- Phosphatidylglycerophosphate synthase,**
enzymatic activity detection, phospholipids biosynthesis, *Saccharomyces cerevisiae*, autoradiography 3364.
- Phosphatidylinositol synthase,**
enzymatic activity detection, phospholipids biosynthesis, *Saccharomyces cerevisiae*, autoradiography 3364.
- 6-Phospho- β -D-galactosidase,**
genes, plasmid pL264, transformation, *Lactobacillus casei* 5345.
- Phospho-2-keto-3-deoxygluconate aldolase,**
purification, characterization, dyes ligands chromatography, *Zymomonas mobilis* 4294.
- Phosphoenolpyruvate,**
analogs inhibition, phosphoenolpyruvate carboxylase activity, *Escherichia coli* 3489.
- Phosphoenolpyruvate carboxylase,**
activity, phosphoenolpyruvate analogs inhibition, *Escherichia coli* 3489.
Escherichia coli, purification, methodology 5978.
- 6-Phosphofructokinase,**
purification, characterization, *Saccharomyces cerevisiae* 7684.
purification, characterization, yeasts 6007.
- Phosphoglucuronate dehydratase,**
purification, affinity chromatography, characterization, *Zymomonas mobilis* 4293.
- Phosphoglucuronate dehydrogenase,**
stability, comparison *Bacillus stearothermophilus*, yeasts 73.
- Phospholipase A1,**
purification, characterization, *Saccharomyces cerevisiae* 1767.
- Phospholipase A2,**
purification, characterization, *Vibrio vulnificus* 7676.
- Phospholipase C,**
active sites, N.M.R., X-ray crystallography, *Bacillus cereus* 5986.
bacteria, activity, soil 2947.
Propionibacterium acnes, purification, characterization 8563.
(S,S)-N,N'-ethylene diamine succinic acid, inhibition, *Actinomyces*, production 5267.
- Phospholipase C inhibitor,**
purification, characterization, *Streptovorticillum mycoheptanicum* 7672.
- Phospholipids,**
biosynthesis, *Saccharomyces cerevisiae*, enzymatic activity detection, autoradiography 3364.
Microsporum gypseum, biosynthesis 1851.
- Phosphonic amides,**
inhibition, *Clostridium histolyticum*, *Clostridium histolyticum* 25.
- Phosphonoacetic acid,**
resistance, herpes simplex virus 2, herpes simplex virus 1 2192.
resistance, mutants, herpes simplex virus 1 2193.
- N-(Phosphonomethyl)glycine,**
activity, *Phaseolus vulgaris* root rot effects on 7943.
biodegradation, nutrient sources, *Pseudomonas*, *Alcaligenes* 8684.
toxicity, biodegradation, soil microorganisms 2175.
- Phosphoprotein phosphatase,**
purification, characterization, yeasts 933.
- Phosphoribulokinase,**
quaternary structure, cross-linking use, *Alcaligenes eutrophus* 6840.
- Phosphoric acid,**
effects on, *Trichoderma viride*, cellulase, hydrolysis, cellulose 188.
inactivation 4-hydroxy-2-oxoglutarate aldolase, dimerization, *Escherichia coli* 1789.
Phytophthora sensitivity 7383.
- Phosphoric amides,**
inhibition, collagenase, *Clostridium histolyticum* 25.
- Phosphoric diester hydrolases,**
purification, *Flammulina velutipes* 5979.
- Phosphorous acid,**
antifungal activity, *Phytophthora* 8124.
- Phosphorus,**
association, *Glomus fasciculatum*, enhancement, *Trifolium subterraneum*, *Pearlgronium*, growth 2943.
availability, vesicular-arbuscular mycorrhizas colonization, *Allium cepa* growth 3947.
chemical analysis, biomass assays, soil microorganisms, soils (organic) 5631.
concentration, soil microorganisms biomass 6348.
effects on fungi incidence, *Lolium perenne* roots 6340.
effects on, nitrogen fixation, *Rhizobium meliloti*, vesicular-arbuscular mycorrhizas inoculation effects on, *Medicago sativa* 8221.
effects on nodulation, nitrogen fixation, inoculation, *Rhizobium*, vesicular-arbuscular mycorrhizas, nodulation 5628.
effects on rhizoplane microorganisms, bacteria, association, *Gramineae* 6334.
endomycorrhizas interaction, growth, *Lolium perenne* 8971.
Glomus fasciculatum, effects on hyphae formation, *Trifolium* 8934.
interaction, vesicular-arbuscular mycorrhizas fungi, *Meloidogyne incognita*, mixed infection, *Lycopersicon esculentum* 371.
Lycopersicon esculentum predisposing factors, *Verticillium dahliae* wilt 3833.
nutrient uptake, *Glomus fasciculatum*, pH, ammonium nitrate ratio effects on, *Chrysanthemum morifolium* 5642.
nutrient uptake, mycorrhizas, plants 5627.
nutrient uptake, *Pisolithus tinctorius* inoculation, seedlings, *Quercus nuba* 8935.
nutrient uptake, stimulation, vesicular-arbuscular mycorrhizas, *Arachis hypogaea* 5641.
nutrient uptake, vesicular-arbuscular mycorrhizas, *Citrus* 8216.
nutrients removal, waste water, wetlands 1481.
Phaseolus vulgaris, effects on nitrogen fixation, *Rhizobium* 7286.
phytic acid, nutrient availability, single-cell protein, *Saccharomyces cerevisiae* effects on, feeding trials, rats 7883.
release, 6-phytase, lactic acid bacteria, fermentation, com 6977.
removal, role, microorganisms wastewater treatment 3190.
Sorghum vulgare, effects on vesicular-arbuscular mycorrhizas 8200.
sources, soil microorganisms, aluminum phosphate utilization 2151.
uptake, *Medicago sativa*, *Corynebacterium in:disolium* wilt, disease resistance effects on 3879.
uptake, stimulation, *Glomus mosseae* inoculation, *Malus domestica* 3942.
uptake, vesicular-arbuscular mycorrhizas, montane environments grasslands 1260.
- Phosphorus cycle,**
biogeochemistry, forests 5536.
soil, bacteria, reviews 4626.
soil microorganisms, crop fields 5635.
- Phosphorus 31,**
metabolism, N.M.R., wastewater treatment, microorganisms 4092.
- Phosphorylase,**
phosphorylase kinase phosphorylation, comparison cyclic AMP dependent protein kinase, yeasts 896.
- Phosphorylase kinase,**
phosphorylation yeasts phosphorylase, comparison cyclic AMP dependent protein kinase 896.
- Phosphorylase phosphatase,**
purification, characterization, yeasts 933.
- Phosphorylation,**
thymidine kinase, herpes simplex virus 1, sensitivity relationship, 9-(2-hydroxyethoxy)methylguanine, (2-bromovinyl)-2'-deoxyuridine 2225.
- 3-Phosphokilmate 1-carboxyvinyltransferase,**
purification, *Escherichia coli* 7714.
purification, *Schizosaccharomyces pombe* 1800.
- Phosphosulfatylserine,**
production, *Pseudomonas syringae* pv. *phaseolicola* 2763.
- Phosphotransferase,**
Staphylococcus aureus, *Staphylococcus epidermidis*, clinical isolates, purification, characterization, role, antibiotic resistance 5165.
- Photosynthetic apparatus,**
Lemna minor, ornithine toxicity, *Cortinarius speciosissimus*, structure-activity relationships 1943.
- Photobacterium phosphoreum,**
continuous culture, methodology 1607.
- Photobleaching,**
association, *Methanobacterium thermoautotrophicum* coenzyme F420 assays 681.
- Photochemistry,**
oxygen free radicals, role lignin degradation, models, fungi 3663.
- Photoinactivation,**
pseudorabies virus, methylene blue, light, electricity 468.
- Photolinduction,**
antifungal activity, Thiophene derivatives 3060.
ceresporin, production, superoxide, oxygen ions 7901.
- Photometry,**
antimicrobial antibiotics measurements 7464.
antibiotic sensitivity testing, bacteria, computer applications 3076.
methodology, antibiotics, antibacterial activity, *Staphylococcus aureus*, phagocytosis, viability 6771.
- Photooxidation,**
media (culture), agar, *Campylobacter fetus* 4210.
petroleum, toxicity, marine bacteria 6664.
- Photoperiod,**
Metarhizium anisopliae inoculum production, biological control, *Cercopidae* 5266.
- Photoreduction,**
U.V. radiation, choline oxidase, *Alcaligenes* 891.
- Photosensitivity,**
U.V. radiation, *Haemophilus influenzae*, anaerobic conditions, nitrogen 4749.
- Photosynthesis,**
biomass production, phototrophic bacteria 8510.
Carya illinoensis, *Microspora penicillata* powdery mildew effects on 5446.
ectomycorrhizas effects on, *Pinus taeda* 5572.
energetics, bacterial culture, continuous culture, phototrophic bacteria 9304.
mycorrhizas, effects on, growth, *Pinus contorta* 5538.
Rhodospirillum rubrum, reaction centers preparation methodology 2509.
- Phototropic bacteria,**
bacteriorhodophyll, extraction methodology 9318.

Phototrophic bacteria, (continued)

- culture methodology 4214.
 nitrogen fixation regulation, nitrogenase, iron proteins modification 2611.
 photosynthesis, biomass production 8510.
 photosynthesis, energetics, continuous culture, batch culture 9304.
 storage, nitrogen (liquid), anaerobic conditions 4215.
Phragmidium violaceum,
 rust, *Rubus uimifolius*, Australia 8012.
Phthalic acid,
 biodegradation, bacteria, reviews 7828.
 biodegradation, soil microorganisms 8961.
 decarboxylation, *Bacillus*, marine microorganisms, biodegradation 998.
 esters, biodegradation, relationship, carbon dioxide, production, microorganisms 3660.
Phycomyces blakesleeanus,
 lactate dehydrogenase reduction, pyruvic acid, kinetics 2620.
 malate dehydrogenase, oxaloacetic acid binding, kinetics 3454.
 4-methylthiazole-5-acetic acid, isolation, identification 7771.
Phyllocladus olivacea,
 biological control, *Hirsutiella thompsonii* var. *synnematos*, conidia production, inoculum 3363.
Phyllocladus,
 Mycoplasma-like organisms, Manihot esculenta, Colombia 8027.
 mycoplasma-like organisms, ultrastructure, lesions, leaves, *Leguminosae* 8773.
Phylloplane,
 Acor pseudoplatanus, microflora succession 8936.
 electrical properties measurement, phytopathogenic fungi spores discharges 7914.
 electrical properties, phytopathogenic fungi spores discharges, *Phaseolus vulgaris*, Zea mays 7143.
 electrical properties, phytopathogenic fungi spores discharges, *Phaseolus vulgaris*, Zea mays 7925.
 Glycine max, fungi, *Azotobacter chroococcum*, secretions, effects on 7252.
Phyllospheerium fungicola,
 fungi, *Adiantum capillus-veneris*, *Ceterach officinarum*, *Asplenium filare*, *Chelanthus catanensis* 8981.
Phyllosticta maydis,
 toxins structure 1952.
Phyllosticta,
 resistance, *Vitis vinifera* × *Muscadina rotundifolia* hybrids, cross-breeding 3832.
Rhymatrichum,
 root rot, *Gossypium barbadense*, *Gossypium hirsutum* 6280.
Phymatrichum omnivorum,
 ecological distribution, relationship soil cations 374.
 host-parasite interactions, *Gossypium hirsutum*, observation methods, equipment 2626.
 host-pathogen interactions, sorghum bicolor 5437.
 root rot, *Gossypium hirsutum*, disease control, ammonia 5523.
 root rot, *Gossypium hirsutum*, disease control, soil temperature + water potential 8009.
Physea angulata,
 plant diseases, okra mosaic virus, epidemiology, Nigeria 6262.
Physea floridana,
 potato leaf roll virus, pathogenicity, disease transmission, vectors, *Myzus persicae* 4553.
Physeum polycapheum,
 plasmodia, microfilaments, proteins, isolation, characterization 5954.
Phyical activity,
 medical personnel, effects on airborne microorganisms levels, operating theaters 6720.
3-Phytase,
 purification, kinetics, *Saccharomyces cerevisiae* 4319.
Phytase,
 phosphorus release, fermentation, lactic acid bacteria, com 6977.
 purification, kinetics, *Saccharomyces cerevisiae* 4319.
Phytic acid,
 nutrient availability, phosphorus, single-cell protein, *Saccharomyces cerevisiae* effects on, feeding trials, rats 7883.
Phyllum graminicolum,
 root rot, disease control, soil amendment, sawdust, oil cake, *Triticum aestivum* 8088.
Phytoalexins,
 antifungal activity, *Cladospirium cucumerinum*, *Phaseolus aureus* 5520.
 defensive mechanisms, infection, *Ceratocystis ulmi*, *Chronoderium purpureum*, *Coriaria versicolor*, *Ulmus glabra* 5500.
 disease resistance, plants 8900.
Gossypium barbadense accumulation association *Verticillium dahliae* wilt 2824.
 inducers, disease control, *Helminthosporium oryzae* brown spot, *Oryza sativa* seedlings 3887.
 Lycopersicon esculentum, *Verticillium albo-atrum* infection 7200.
 plant cells culture, disease resistance, host-pathogen interactions, role, reviews 2056.
 production, *Diphysa robinoides* leaves, fungi inoculation 5519.
 production, host-pathogen interactions, *Pseudomonas syringae* infection, cell culture, Glycine max 2056.
 production, mycolaminar stimulation, *Phytophthora*, receptors, plasma membranes, Glycine max 2075.
 production, *Sophora japonica* leaves, *Helminthosporium carbonum* inoculation 1131.
 tolerance, *Nectria haematococca*, characterization 426.
Phytopathogenic fungi,
 antifungal activity, *Catharanthus roseus* extracts 3884.
 antimicrobial activity, *Butea monosperma* seeds oils 4782.
 antimicrobial activity, *Orchidaceae* roots oils 4779.
 biological control, soil inoculum, *Trichoderma viride*, *Trichoderma harzianum* 8918.
 biological control, *Teratoperna oligocladium*, hyperparasitism, *Sclerotinia* 975.
 biological control, *Trichoderma parasitism*, ultrastructure 1213.
 canker, *Rubus*, USA, Ohio 8846.
 damping-off, *Pinus banksiana*, *Picea mariana*, soil amendment, organic matter, effects on 1239.
 disease resistance, host-pathogen interactions, genotype-environment interactions, plant breeding, crops 2865.
 disease resistance, *Pisum sativum*, polygalacturonase inhibitors 7203.
 disease resistance plant breeding, *Cajanus cajan* 8699.
 disease resistance plant breeding, *Pennisetum americanum* 8994.

Phytopathogenic fungi, (continued)

- disease resistance, *Triticum aestivum*, antifungal activity, alka-2,4-dienal, α -trifluene, β -trifluene 6305.
 diseases, India, conferences 2547.
 ecological distribution, host range, India, new records 1963.
 foliar diseases, *Leguminosae* 6237.
 fungicides resistance, disease control, mathematical models, plant diseases 439.
 host-pathogen interactions, disease resistance, plant breeding, *Vitis vinifera*, Coffee, Cocos, *Ficus carica* 2869.
 host-pathogen interactions, in vitro growth, plant cells monosaccharides 7125.
 host-pathogen interactions, mathematical models, population density, disease resistance, plant diseases 2772.
 host-pathogen interactions, roots, agricultural practices, *Triticum aestivum* 3807.
 incidence, fungicides efficacy, *Phaseolus vulgaris* 2066.
 infection, *Oryza sativa*, pathogenesis, epidemiology, etiology 1966.
 inoculation, spraying, plant diseases 2771.
 mancozeb + curzate antifungal activity 2085.
 3-phenyl-prop-2-yn-1-ols synthesis, antifungal activity 3059.
 phytotoxins, conferences 9347.
 plant diseases, check lists, Brunei, books 7640.
 plant diseases, conferences 7644.
 plant diseases, conferences 9350.
 plant diseases, disease resistance inducers 4571.
 plant diseases, disease spread, computer applications 6220.
 plant diseases, Glycine max, disease control, pesticide applications association rainfall 1220.
 plant diseases, mathematical models, disease spread 7127.
 plant diseases, pathogenesis, reviews 4493.
 plant diseases, Saudi Arabia 5399.
 plant diseases, turfgrass, books 1688.
 pod rot, *Arachis hypogaea*, calcium levels effects on pathogenesis 1121.
 rhizosphere, *Pseudomonas siderophores* antagonism, *Solanum tuberosum* 2830.
 root rot, pasture, *Medicago* 333.
 root rot, Zea mays, etiology 7952.
 root, *Colocasia antiquorum*, etiology, pathogenesis 8010.
 soil microorganisms, methyl bromide, toxicity 1218.
 soil-borne diseases, biological control, suppressive soils induction, reviews 331.
 soil-borne diseases, disease control, soil amendment, sewage sludge composts 311.
 soil-borne diseases, disease control, suppressive soils 332.
 soil-borne diseases, models, reviews 5402.
 soil-borne diseases, plant diseases, biological control, suppressive soils 330.
 soil-borne diseases, suppressive soils 328.
 soil-borne diseases, suppressive soils, soil properties, reviews 329.
 spores discharges, phytoplane electrical properties measurement 7914.
 spores discharges, phylloplane electrical properties, *Phaseolus vulgaris*, Zea mays 7143.
 spores discharges, phytoplane electrical properties, *Phaseolus vulgaris*, Zea mays 7925.
 spores, introduced species, quarantine, New Zealand 6329.
 spores, wind dispersal, modelling, crop fields, *Hordeum vulgare* 5403.
 virulence, genetic variance, relationship, weed control, biological control 3893.
Phytophthora,
 antagonism, rhizosphere actinomycetes, *Eucalyptus marginata*, *Pinus radiata* 2099.
 antifungal activity, phosphorous acid, efosite-Al 8124.
 black pod, maturity effects on, *Theobroma cacao* 7993.
 disease resistance plant breeding, *Vigna unguiculata* 8998.
 infection, mycolaminar receptors, plasma membranes, stimulation phytoalexins production, Glycine max 2075.
 interaction, ectomycorrhizas, reviews 393.
 metalaxyl sensitivity 5528.
 zoospores, spore germination, viability, tetrazolium bromide staining 805.
 phosphoric acid sensitivity 7383.
 root rot, crown rot, *Castanea sativa* disease control 3876.
 root rot, crown rot, orchards, *Juglans regia* 271.
 root rot, Glycine max, biological control, *Hypochoeris glabra* 5510.
Phytophthora aetivum,
 crown rot, *Bacillus subtilis* antagonism, biological control, seedlings, *Malus pumila* 7212.
 crown rot, *Malus*, antagonists, bacteria, effects on pathogenesis 5511.
 fruit rot, disease control, fungicides, *Fragaria chilensis* 7214.
 growth, herbicides effects on 2177.
Phytophthora capsici,
 blight, crown rot, *Capsicum annuum*, disease resistance 5508.
 disease resistance, *Capsicum annuum* leaves, peroxidase activity 2844.
 root rot, disease resistance, plant breeding, *Capsicum annuum*, *Capsicum frutescens* 8094.
Phytophthora cinamomi,
 antifungal activity, efosite-Al, metalaxyl, plant diseases, roots, *Persea americana* 8923.
 dieback, *Eucalyptus marginata*, disease control 8170.
 dieback, *Eucalyptus tetradonta*, stands 359.
 disease control, seedlings immersion, water temperature, *Pinus radiata* 7219.
 infection, *Eucalyptus maculata*, *Eucalyptus pilularis*, factors affecting pathogenesis 2119.
 infection, *Eucalyptus marginata* phloem, stems lesions development 3842.
 infection, *Eucalyptus*, roots, water relations 5605.
 infection, relationship water content, bark, *Eucalyptus marginata* 358.
 infection, roots, *Eucalyptus marginata*, *Eucalyptus calophylla*, temperature, effects on 3912.
 media (selective), detection, *Persea americana* roots 5932.
 metalaxyl sensitivity 5533.
 overwintering, survival, *Abies fraseri* seedlings 1235.
 phosphoric acid sensitivity 7383.
 root rot, *Abies fraseri*, flooded soils effects on pathogenesis 5610.
 root rot, disease control, metalaxyl, efosite-Al, injection, *Persea americana* 8125.
 root rot, *Eucalyptus sieberi*, soil types 5584.
 spores, *Catenaria anguillulae* parasitism, biological control, root rot, *Citrus*, *Persea* 5515.
 sporulation, zoospores, survival, *Rhizobium*, effects on 7262.
 stem rot, *Rubinia pseudocacia*, new records, China, People's Rep. 369.
 survival, metalaxyl infection soil microorganisms 2091.
Phytophthora citricola,
 metalaxyl sensitivity 5533.

Subject Index

Phytophthora citricola, (continued)

phosphoric acid sensitivity 7383.

Phytophthora citrophthora,

overwintering, Citrus, disease resistance 5509.

phosphoric acid sensitivity 7383.

Phytophthora colocasiae,

soil, survival, saprophytes, association, Colocasia 8958.

Phytophthora cryptogaea,

disease resistance screening projects, plant breeding, Carthamus tructoria 7188.

root rot, disease resistance, plant breeding, Carthamus tinctorius 6296.

root rot, disease resistance, screening, environmental factors, Carthamus tinctorius 7970.

rot, Solanum tuberosum, pathogenesis, USA, Texas 1155.

salinity effects on infection susceptibility, Chrysanthemum morifolium 7181.

Phytophthora drechsleri,

blight, Cucumis, China, People's Rep. 7170.

disease resistance plant breeding, Cajanus cajan 8899.

induction Phytophthora infestans, oospores production, pathogenicity, late blight, Solanum tuberosum 8034.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

Phytophthora fragariae,

infection, Fragaria, disease control, use, fumigation, comparison, fungicides drenches 1182.

red core, vesicular-arbuscular mycorrhizas protection, Fragaria vesca 5448.

Phytophthora infestans,

chloramphenicol resistance 7320.

cross-resistance, metalaxyl, fungicides, disease control, Solanum tuberosum, Cucumis sativus 2636a.

developmental stages, chloramphenicol, streptomycin effects on 1401.

haustoria, disease resistance, callose growth, tubers, Solanum tuberosum 2008.

infection, effects on membrane potential, cells, Solanum tuberosum 2014.

infection, solanum tuberosum, disease resistance correlation papillae 6303.

infection susceptibility, fertilizer applications, leaves, Solanum tuberosum 2812.

late blight, disease control, fungicides, foliar applications, Solanum tuberosum 8915.

late blight, disease control, fungicides, Lycopersicon esculentum 1206.

late blight, disease control, metalaxyl, mancozeb, Solanum tuberosum 8926.

late blight, fungicides disease control, Solanum tuberosum 1214.

late blight, Solanum tuberosum, disease control, use, ofurace controlled-release granules 2887.

late blight, Solanum tuberosum, pathogenesis, ultrastructure 3837.

metalaxyl, antifungal activity 6313.

mycelia, fatty acid composition, role pathogenicity, Solanum tuberosum 2012.

pathogenicity, oospores production, Phytophthora drechsleri induction, late blight, Solanum tuberosum 8034.

pathogenicity, recombination, inheritance, Solanum tuberosum 2815.

phosphoric acid sensitivity 7383.

streptomycin antifungal activity, cations effect on 7379.

Phytophthora lateralis,

soil isolation methodology 5650.

Phytophthora megasperma,

host-pathogen interactions, Medicago sativa, disease resistance 8887.

host-pathogen interactions, ultrastructure, disease resistance, Medicago sativa 8888.

pathogens, Rhizobium japonicum growth, Glycine max, pesticides effects on 1212.

rot, rot, Brassica oleracea var. capitata, Brassica oleracea var. botrytis, USA, Oregon 5468.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

Phytophthora pseudotsugae,

root rot, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

root rot, Pseudotsuga menziesii, etiology, pathogenesis 3909.

Phytoplankton,

nutrient sources, ponds, composting, solid wastes, sewage sludge 6689.

Phytotoxicity,

crop residues, digestion (anaerobic), soil microorganisms decomposition, Hordeum distichon 2936.

microorganisms toxins, reviews 3756.

Phytotoxins,

Alternaria alternata, tetroxin, biosynthesis, isolation 2762.

altersolanol A, Alternaria solani, phytotoxicity 2813.

aspergillomycin A, aspergillomycin B inhibition peptidyl dipeptidase 3734.

carboxypeptidase A, aminopeptidase (microsomal) activity, Aspergillus oryzae 1955.

biosynthesis, Verticillidiella liquid culture 972.

Botrytis fabae chocolate spot, Vicia faba 3794.

Cercospora beticola, inhibition protons pumps, microsomes, Pisum sativum 8744.

cercosporin, production, superoxide, oxygen, ions, photoinduction 7901.

Helminthosporium carbonum, structure-activity relationships, Zea mays 1983.

Helminthosporium maydis, analogs, structure-activity relationships, Zea mays 1983.

Helminthosporium maydis, roots, bioassays, susceptibility, genes, Zea mays 8750.

Helminthosporium victoriae, root specificity, Avena sativa 7902.

hydroxy-hydroperyleneones, structure, Alternaria 8735.

isolation, Mycosphaerella pinodes, Ascochyta pini, infection, Pisum sativum 2781.

Mycosphaerella, spore, pathogenesis, Santalum album 8955.

peptides, structure, Paecilomyces marquandii 8742.

Periconia circinata, host-pathogen interactions, effects on gene expression, pc lorch, Sorghum 4519.

phenomene, formation, Phoma destructiva infection, Lycopersicon esculentum 8812.

phenomene, production, Phoma 8747.

phytopathogenic fungi, conferences 9347.

plant diseases, role 6222.

production, Fomes annosus 5392.

production, liquid culture, Cochliobolus victoriae 8743.

Pseudomonas syringae pv. phaseolicola, amino acid composition 1940.

purification, characterization, Phoma destructiva 8746.

soil microorganisms, role allelopathy, soil fertility, crops 4636.

structure, Alternaria solani 8738.

synthesis, Rhynchosporium secalis 1936.

tenuazonic acid, isolation, association, Alternaria alternata leaf blight, tenuazonic acid, characterization 5394.

toxicity, soil microorganisms composition, Malus pumila rhizosphere 2146.

zinnol production, Alternaria 7903.

Picea,

bud rust, pathogenesis, Chrysomya wononii 5580.

ectomycorrhizas, Sphaerosporella brunnea 8162.

forests, humus, thiophosphate sulphurtransferase, soil microorganisms 2916.

Picea abies,

Armillaria mellea root rot, susceptibility, relationship, soil nutrients, soil pH 2919.

callus culture, disease resistance, Phaeolus schweinitzii infection 2826.

disease resistance, Heterobasidion annosum, fertilization effects on 8169.

growth rings, relationship Armillaria mellea, infection 355.

Heterobasidion annosum, biological control, antagonism, in vitro, fungi 8181.

pathogenicity, Armillaria mellea 353.

seedlings, cold storage, infection, Basidiomycetes 8175.

viruses infection, leaves, cytopathology 8325.

water stress, blue stain, pathogenicity, Ceratocystis ponicillata, Ceratocystis polonica 8173.

wound infection, bacteria inhibition decay fungi 7238.

Picea canadensis,

inoculum efficacy, immobilized cells, ectomycorrhizas 8163.

Picea glauca,

pathogens, Caloscypha fulgens, dissemination, Mammalia 7237.

Picea mariana,

Armillaria mellea root rot, susceptibility, relationship, soil nutrients, soil pH 2919.

litter biodegradation, leaves, winter, sub-polar environments 3907.

phytopathogenic fungi damping-off, soil amendment, organic matter, effects on 1239.

Picea rubens,

decline, roots infection, Armillaria mellea 8948.

Picea altchensis,

Armillaria mellea root rot, susceptibility, relationship, soil nutrients, soil pH 2919.

forests, soil, vertical distribution, Mycena galopus, Marasmius androsaceus, Onychium latus grazing effects on 8939.

leaf litter, decomposition, Mycena galopus, Marasmius androsaceus, competition Onychium latus grazing effects on 8940.

plantations, nitrogen cycle, litter, humus 8167.

roots colonization, ectomycorrhizas, inhibition, heavy metals 8168.

roots, colonization, population levels, fertilizer applications inhibition, ectomycorrhizas 5552.

seedlings inoculation, growth stimulation, ectomycorrhizas 5565.

seedlings, inoculation, Telephora terrestris, silviculture 345.

seedlings planting, inhibition ectomycorrhizas 5566.

Pichia farinosa,

glucose, fermentation, glycerol, production 3609.

Pichia labacensis sp. nov.,

carbon sources fermentation, sulfite liquor, single-cell protein production 6816.

Pichia membranefaciens,

topache, fermentation 1698.

Pichia pastoris,

formaldehyde dehydrogenase (glutathione), purification, characterization 1782.

formate dehydrogenase, purification, characterization, methanol oxidation 2614.

Pichia pinus,

growth, methanol substrates 1043.

Pichia polymorpha,

suppressor mutant, inulinase, fructose production 3526.

Pichia segobiana,

xylose fermentation, ethanol production 5285.

Pichia spartinae,

single-cell protein production, substrates, Musa paradisiaca crop residues 863.

- Pichia stipitis**, xylose fermentation, ethanol production 5265
 xylose fermentation, ethanol production, comparison, *Pachysolen tannophilus* 6136.
- Picrovirus**, recombinants, genetic engineering, vaccines production 6635.
- Pierce's disease**, disease resistance, cultivars, plant breeding, *Vitis vinifera* 8068.
 disease resistance, plant breeding, cultivars, *Vitis vinifera* 8064.
- Pieris rapae**, biological control, pathogenicity, *Erynia pieris* 6906.
- Pigment**, biosynthesis, *Streptococcus agalactiae*, animal isolates, clinical isolates 144.
- Pigments**, concentration, *Vigna radiata*, plant viruses infection 2776.
 fluorescence, production, *Pseudomonas*, media (selective) 7608.
 monomer, biosynthesis, *Cryptococcus neoformans*, indole compounds utilization 2645.
Nocardia fructiferi var. *stomycini*, biosynthesis, isolation, factors affecting 1857.
 production, *Candida utilis* fermentation, extracts, *Beta vulgaris* 6069.
 production, food dyes, immobilized cells, *Monascus* 5238.
 production, media (culture), enhancement, *Pseudomonas aeruginosa* 7617.
 production, *Monascus purpureus* 5251.
 production, *Streptococcus* group B, detection, identification, use 2475.
- Pigs**, animal isolates, *Escherichia coli*, antibiotic sensitivity testing 6500.
 animal isolates, *Haemophilus pleuropneumoniae*, drug resistance levels 6406.
 animal models, immunogenicity, rotavirus (bovine) vaccines 3177.
 animal wastes + cellulose, substrates, digestion (anaerobic) 2333.
 animal wastes, digestion (aerobic), storage, anaerobic conditions, digestion (anaerobic) 7507.
 animal wastes, digestion (anaerobic) 6702.
 animal wastes, digestion (anaerobic), methanogenesis 7514.
 animal wastes, fermentation, silage, nutritive value, feeds 7019.
 animal wastes, wastewater treatment, aerobic conditions 2377.
 animal wastes, wastewater treatment, aerobic conditions, odors 2378.
 animal wastes, wastewater treatment, anaerobic conditions, methanogenesis 9037.
 animal wastes, wastewater treatment, digestion (anaerobic) 7521.
 antibodies, hog cholera virus, bovine diarrhoea-mucosal disease virus, detection, neutralization, immunoperoxidase test 6743.
 aspartate aminotransferase amino acid sequence, comparison, *Escherichia coli* 6843.
 isolation, fecal coliforms, antibiotic resistance, chlortetracycline 5711.
 chlortetracycline containing feeds, animal isolates, anaerobic bacteria, chlortetracycline antibiotic resistance 2197.
 dysentery, prophylaxis, treatment, pyrantel tartrate, + tylosin, + lincomycin, feeds 1918.
 experimental infection, Japanese encephalitis virus, immunoglobulin M, immunoglobulin G, serum, enzyme-linked immunosorbent assay 5011.
 fecal coliforms, tetracycline, antibiotic resistance, characterization 1317.
 feeds additives, chlortetracycline, antibiotic resistance, animal isolates, aerobic bacteria, coliforms, 8295.
Haemophilus pleuropneumoniae infection, immunodiagnosis, 2-mercaptoethanol agglutination 7593.
 immunity, African swine fever virus, vaccines, antigens solubilization, detergents 1452.
 isolation, coliforms, antibiotic resistance, association, chlortetracycline, treatment 3033.
 isolation, *Erysipelothrix rhusiopathiae*, antibiotic resistance, characterization 4695.
 isolation, *Pasteurella multocida*, media (selective) 5912.
 Leptospira vaccines, immunogenicity 4893.
 lung, *Haemophilus influenzae* antigens detection, agglutination 2520.
 fever, slaughter, *Haemophilus* isolation, dilution methodology 2463.
 media, + radiation inactivation, viruses 4087.
 manure, digestion (anaerobic), thermophilic bacteria, mesophilic bacteria, methane production 7523.
 mycotoxicosis association ingestion feeds, Yugoslavia 7048.
 neonates, diarrhoea, clinical isolates, *Escherichia coli*, antibiotic sensitivity testing 5758.
 nephropathy, *Penicillium*, viomellein, contamination, *Hordeum vulgare* 224.
 nutritive value, single-cell protein, *Candida* 1917.
 parvovirus (porcine) infection, diagnosis, gel diffusion precipitin test, pigs 5879.
 pneumonia, *Mycoplasma hyopneumoniae*, enzyme-linked immunosorbent assay, diagnosis 5894.
 pregnancy, feeds contamination effects on fetuses, vomitoxin 2746.
 pseudorabies virus vaccines, preparation, use, *Lens culinaris* agglutinins + agarose immobilization 3182.
 Salmonella typhimurium experimental infection, feeds, chlortetracycline, virginiamycin, antibacterial activity 4468.
 serum, *Brucella abortus* antibodies detection, enzyme-linked immunosorbent assay methodology 5063.
 single-cell protein nutritive value, fermentation, milk, ultrafiltration 1916.
 skin tests, use, antigens, nucleocapsids, pseudorabies virus 617.
 slurries, digestion (anaerobic), inactivation, enterovirus (bovine), vaccinia virus, factors affecting 6684.
 vaccines production, parvovirus (porcine), oils emulsions 7487.
- Pigs**, antigenic determinants, synthetic peptides, structure-activity relationships, antigen-antibody interactions, vaccines, *Escherichia coli* 6557.
 Bacteroides nodosus, immunochemistry, labelling methodology 7624.
 Bacteroides nodosus, vaccines, sheep, purification, characterization, immunogenicity 3185.
Escherichia coli, identification, monoclonal antibodies, enzyme-linked immunosorbent assay 5067.
Haemophilus influenzae, detection, hemadsorption methodology 2470.
Neisseria gonorrhoeae, *Neisseria meningitidis*, vaccines, production, immunogenicity 538.
Neisseria gonorrhoeae, vaccines, production 539.
 proteins, Bacteroides nodosus, agglutination, absorption, bioassays, methodology 678.
 proteins, *Escherichia coli*, subunit structure, purification, characterization, hemagglutination 4252.
Streptococcus sanguis, antigens, enzyme-linked immunosorbent assay methodology 1621.
- Pimelic acid**, *Bacillus sphaericus*, determination methodology 3295.
- Pinus**, *Cronartium quercuum* f.sp. *banksianae* rust, disease control, use, 2-iodobenzanilide, benomyl 3916.
 greenhouses, seedlings, growth, nutrient uptake, stimulation, inoculation, ectomycorrhizas 5567.
 leaves chemical composition, association, *Fomes annosus* root rot 2116.
 leaves, fungi, decomposition, saprophy, food preferences, *Porcillo scaber* 2912.
 needlecast, biological control, use, *Candida* 2924.
 pitch canker, *Fusarium moniliforme* var. *subglutinans*, biological control, *Arthro bacter* 2319.
 plant breeding, disease resistance, blister rust, *Cronartium flaccidum* 2870.
 plantations, *Heterobasidion annosum*, genetic markers, mating types, epidemiology 367.
 seedlings, roots, ectomycorrhizas colonization, culture systems 7637.
 wood decay, brown rot, *Coniophora cerebella*, *Poria vaporaria*, *Gloeophyllum abietinum* 8947.
- Pinus banksiana**, ectomycorrhizas, *Sphaerospora brunnea* 8162.
 ectomycorrhizas, symbionts, Canada 8165.
 phytopathogenic fungi damping-off, soil amendment, organic matter, effects on 1239.
 rust, *Cronartium comptoniae*, epidemiology, host-pathogen interactions, host alternation, *Comptonia peregrina* 5602.
 rust, pathogenesis, *Endonocardium harknessii* 8946.
 seedlings, inoculation, mycelia, ectomycorrhizas 7227.
 seedlings, inoculation, mycelia, ectomycorrhizas 7228.
- Pinus cantata**, bark infection, *Endothia aggregata* sp. nov. 8185.
- Pinus caribaea**, seedlings inoculation, survival, transplant inoculation, ectomycorrhizas 5569.
- Pinus caribaea var. hondurensis**, seedlings, *Ganoderma lucidum*, inoculation, pathogenicity 3922.
 wood, blue stain, disease control 6331.
- Pinus cembra**, *Suillus plorans* inoculation, methodology, reviews 831.
- Pinus contorta**, ectomycorrhizas, phosphate, nutrient uptake, phosphatase, comparison saprophytes, *Basidiomycetes* 5575.
 mycorrhizas, effects on, growth, photosynthesis 5538.
 pathogens, *Caloscypha fulgens*, dissemination, *Mammalia* 7237.
- Pinus densiflora**, wood, antifungal agents, disease resistance, *Fomes annosus* 354.
- Pinus echinata**, seedlings, *Cronartium quercuum* f.sp. *fusiforme* infection susceptibility 5591.
- Pinus elliotii**, seedlings, disease resistance, fusiform rust, *Cronartium quercuum* f.sp. *fusiforme* 2921.
- Pinus elliotii**, density, effects on disease resistance, fusiform rust, *Cronartium quercuum* f.sp. *fusiforme* 8187.
 fusiform rust, *Cronartium quercuum*, pathogenesis 4615.
 lignin, mineralization, fungi, role, marine environment 1026.
- Pinus elliotii var. elliotii**, fusiform rust, *Cronartium quercuum* f.sp. *fusiforme* inoculum, phenology 3921.
 fusiform rust, pathology location, relationship, yield 8943.
 seedlings, stems lesions, fusiform rust, *Cronartium quercuum* f.sp. *fusiforme* 7234.
- Pinus excelsa**, roots, *Helicotylenchus digonicus* parasitism, interspecific relationships, mycorrhizas 348.
- Pinus monticola**, blister rust, *Cronartium ribicola*, disease resistance 5595.
 disease resistance, rust, *Cronartium ribicola* strains, virulence, USA, Oregon 8949.
 roots, plant diseases, pathogens, + *Cronartium ribicola* blister rust, association, *Dendroctonus ponderosae*, *Pityogenes fossilifrons*, USA, Idaho 8182.
- Pinus nigra**, *Cronartium quercuum* f.sp. *banksianae* rust, disease control, use, 2-iodobenzanilide, benomyl 3916.
- Pinus pinaster**, ectomycorrhizas, *Hebeloma cylindrosporum*, chitin levels 3949.
 propagation, roots formation, auxin + ectomycorrhizas effects on 5929.
 blue stain, *Ceratocystis nigra* carpa, *Basidiomycetes* infection, effects on water conductivity 8194.
Cronartium quercuum f.sp. *banksianae* rust, disease control, use, 2-iodobenzanilide, benomyl 3916.
 disease resistance, needle blight, USA 8941.
 disease resistance, *Scirrhia acicola* brown spot, analysis methodology 3925.
 forests, burning effects on nutrient cycles, soil microorganisms, litter, forest floor 8932.
 host specificity, *Verticillidiella wageneri*, morphology, variants 4613.
 hypersensitive response, seasonal variations, *Ceratocystis minor*, *Penicillium* 8193.
 mycorrhizas, bifeno, chlorothal, napropamide, effects on, development 5582.
 roots, *Pisolithus tinctorius* spores inoculation, seedlings survival 5607.
 seedlings, geographical variations, rust susceptibility, *Endonocardium harknessii* 8945.
- Pinus pumila**, litter decomposition, humus production, microorganisms 3952.
- Pinus radiata**, forests, litter, soil, acetylene reduction, nitrogen-fixing bacteria 8937.
 forests, nitrogen, mineralization, fertilizer applications 5541.
 forests, soil mycorrhiza, population levels, relationship *Aphelenchus avenae* 8223.
 hydrolyses, role, ethanol fermentation inhibition, *Saccharomyces cerevisiae* 6132.
 pathology, *Dothiorhiza septospora* needle blight, Ecuador 5600.
 plantations, ectomycorrhizas, fruit bodies formation, environmental factors, *Suillus luteus* 5571.
 rhizosphere, actinomycetes, antagonism, *Laccaria laccata*, *Pythium*, *Phytophthora* 2099.
 seedlings, immersion, water temperature, effects on roots colonization, ectomycorrhizas, disease control, *Phytophthora cinnamomi* 7219.
 wood, hydrolysis, *Saccharomyces cerevisiae*, fermentation, inhibitors 7807.

Subject Index

- Pinus resinosa**, live roots, biodegradation, soil microorganisms 6322.
roots growth, stimulation, colonization, ectomycorrhizas 5561.
- Pinus roxburghii**, seed-borne diseases, seed treatments, thiram, ethylmercuric chloride 8176.
- Pinus silvestris**, wood, decomposition, bacteria 7239.
- Pinus strobus**, ectomycorrhizas, *Pisolithus tinctorius*, in vitro 5543.
roots, *Helicotylenchus digonicus* parasitism, interspecific relationships, mycorrhizas 348.
seedlings colonization, ectomycorrhizas, soil, mines, *Pisolithus tinctorius* 8931.
Verticilladiella procer, incidence, soil, infection pathogenesis, USA, Virginia 3919.
- Pinus sylvestris**, *Armillaria mellea* root rot, susceptibility, relationship, soil nutrients, soil pH 2919.
Basidiomycetes, ectomycorrhizas, Finland 2102.
callus culture, disease resistance, *Phaeoascus schweinitzii* infection 2826.
cytokinins biosynthesis, pH effects on, rhizosphere microorganisms 8161.
disease resistance, Heterobasidion annosum, fertilization effects on 8169.
ectomycorrhizas, Boletaceae, ecological distribution, Finland 2100.
plant diseases, association nutrient dynamics 5601.
roots, *Armillaria mellea* infection, fertilizer applications effects on 2923.
roots colonization, mycelia, spreading, nutrient transport, ectomycorrhizas 5573.
seedlings, ectomycorrhizas, inhibition, non-target organisms, mancozeb, paraquat 5570.
Verticilladiella procer, incidence, soil, infection pathogenesis, USA, Virginia 3919.
viruses infection, leaves, cytopathology 6325.
- Pinus taeda**, embryo, disease resistance, necrosis ultrastructure, fusiform rust, Cronartium quercum f.sp. fusiforme 362.
fusiform rust, pathology location, relationship, yield 8943.
photosynthesis, nitrogen sources, carbon sources, translocation, ectomycorrhizas effects on, *Pisolithus tinctorius*, *Suillus granulatus* 5572.
seedlings colonization, ectomycorrhizas, soil, mines, *Pisolithus tinctorius* 8931.
seedlings, roots growth, inoculation, ectomycorrhizas, *Pisolithus tinctorius* 3908.
- Pinus virginiana**, disease resistance, pitch canker, *Fusarium moniliforme* var. subglutinans 5599.
seedlings colonization, ectomycorrhizas, soil, mines, *Pisolithus tinctorius* 8931.
- Pinus wallichiana**, seed-borne fungi, seed-borne diseases, fungicides, seed treatments 8177.
- Pipemidic acid**, antibacterial activity, *Chlamydia trachomatis* 3119.
antibacterial activity, *Staphylococcus aureus* L form growth 9097.
- Piper bethe**, *Phytophthora parasitica* var. *piperina* rot, biological control, fungi extracts 5518.
- Piperacillin**, analogs, antibacterial activity, characterization 7433.
antibacterial activity, anaerobic bacteria 6539.
antibacterial activity, apacillin comparison 8527.
antibacterial activity, clinical trials 6526.
antibacterial activity, Enterobacteriaceae 4809.
antibacterial activity, gram-negative bacilli 7431.
antibiotic resistance, association, β -lactamase, *Pseudomonas aeruginosa* 4696.
antibiotic sensitivity testing, clavulanic acid effects on, *Bacteroides fragilis* 9164.
antibiotic sensitivity testing, clinical isolates, hysterectomy postoperative infection, man 9177.
antibiotic sensitivity testing, *Proteus penneri* 9162.
antibiotic synergism, amikacin, antibiotic sensitivity testing, *Pseudomonas aeruginosa*, *Pseudomonas cepacia*, clinical isolates, cystic fibrosis, children 3170.
Streptococcus group B susceptibility 1381.
thienamycin, antibiotic antagonism, antibacterial activity, *Pseudomonas aeruginosa* 7442.
vancomycin, antibiotic sensitivity testing, *Streptococcus faecalis* 4808.
- Pipes**, corrosion, bacteria, fungi, air conditioning 4677.
corrosion, sulfate-reducing bacteria, oil and gas industry, reviews 8411.
- Piptoporus betulinus**, fruit bodies, extracts, antifungal activity 9201.
- Pirlimycin**, clindamycin analogs, synthesis, antibacterial activity 6543.
- Pirimidic acid**, drug sensitivity testing, *Aeromonas salmonicida* 8303.
- Pisatin**, tolerance, *Nectria haematococca*, detoxification relationship 431.
- Plaques**, seafood, food contamination, yeasts, bacteria 8712.
- Plethidium**, ectomycorrhizas, mycelia, inoculation, seedlings, *Pinus banksiana* 7227.
- Pisolithus tinctorius**, +auxin, effects on roots formation, propagation, *Pinus pinaster* 5929.
ectomycorrhizas, colonization, seedlings, mines, soil, *Pinus* 8931.
ectomycorrhizas, effects on translocation, carbon sources, nitrogen sources, photosynthesis, *Pinus taeda* 5572.
ectomycorrhizas formation, Coniferales seedlings, high-altitude environments, mines 5547.
ectomycorrhizas, inoculation, stimulation, roots growth, seedlings, *Pinus taeda* 3906.
ectomycorrhizas, liquid culture, inoculum production 5937.
ectomycorrhizas, *Pinus strobus*, in vitro 5543.
effects on growth, photosynthesis, *Pinus contorta* 5538.
inoculation, nutrient uptake, phosphorus, nitrate, seedlings, *Quercus rubra* 8935.
inoculation, *Quercus*, methodology, reviews 831.
inoculation, stimulation growth, nutrient uptake, seedlings, greenhouses, *Pinus* 5567.
isolation, pure culture, methodology, nutrient requirements, reviews 829.
mycorrhizas, Coniferales seedlings, cold storage, ethylene, fungicides, effects on survival 5581.
spores, inoculation, Coniferales roots, seedlings survival 5607.
spores, inoculum, *Pseudotsuga menziesii*, *Abies concolor*, *Abies magnifica*
- Pisolithus tinctorius**, (continued)
var. *shastensis* 5579.
symbiosis, plants roots, measuring techniques, reviews 832.
trees inoculum production methodology, reviews 830.
- Pistacia vera**, shoot blight, *Botrytis cinerea*, fungicides, disease control 2896.
- Plasm**, varieties, *Fusarium oxysporum* f.sp. *pisi* wilt, field trials 1979.
- Plasm sativum**, disease resistance, epicoetyl rot epicoetyl rot 6287.
disease resistance, *Erysiphe polygoni* powdery mildew 1978.
disease resistance, polygalacturonase inhibitors, phytopathogenic fungi 7203.
disease resistance, root rot, *Aphanomyces eutiches*, stem rot, *Rhizoctonia solani*, plant breeding 2852.
Erysiphe polygoni infection, disease control 8107.
Fusarium solani f.sp. *pisi* root rot, *Pythium ultimum* damping-off, disease control, use, *Trichoderma viride*+fungicides 338.
growth, nutrient uptake, inoculation, vesicular-arbuscular mycorrhizas 7257.
indole-3-acetic acid role nodulation, nitrogen fixation, *Rhizobium leguminosarum* 2167.
infection, *Mycosphaerella pinodes*, *Ascochyta pisi*, phytotoxins isolation 2781.
leaves, light penetration, *Erysiphe pisi* conidia spore germination, germ tubes formation relationship 2774.
microspores, protons pumps, inhibition, phytotoxins, *Cercospora beticola* 8744.
nodulation competition, *Rhizobium japonicum*, *Rhizobium leguminosarum*, rhizosphere 2967.
nodulation, *Rhizobium*, role nodulin gene expression 2981.
nodules, glutamine synthase cross-reactivity, *Rhizobium leguminosarum* 3956.
nodules, nitrogen fixation, *Rhizobium*, energy metabolism, electron transport chain 2972.
nodules, nitrogen fixation, *Rhizobium leguminosarum*, factors affecting 2987.
phytoxicity, *Alternaria* A, *Alternaria solani* 2813.
plant breeding, *Ascochyta pinodella* blight disease resistance, inheritance 5477.
plant diseases, cucumber mosaic virus, bean yellow mosaic virus, amino acid composition 6227.
protons, uptake, *Cercospora beticola*, toxins, inhibition 7122.
Pythium seed rot, biological control, use, *Trichoderma* 2779.
resistance, comparison, susceptibility cultivars, *Erysiphe pisi* development association 245.
Rhizoctonia solani stem rot, disease resistance 1201.
Rhizoctonia stem rot, factors affecting disease resistance 1199.
rhizosphere, Saprolengnaceae, Pythiaceae 8220.
root nodules proteins, *Rhizobium leguminosarum* interaction 4644.
seedlings, population dynamics, *Rhizobium leguminosarum* 8233.
stunt *Spiroplasma* transmission, *Euscelidius variegatus* vectors 8030.
varieties, susceptibility, rust, *Uromyces viciae-fabae* 8774.
wilt, *Fusarium oxysporum* f.sp. *pisi* incidence 241.
- Pitch canker**, *Fusarium moniliforme* var. subglutinans, *Arthrobacter*, biological control, *Pinus* 2918.
Fusarium moniliforme var. subglutinans, *Pinus virginiana*, disease resistance 5599.
- Pithium debaryanum**, infection, seedlings, plants, disease control, cyanamide 3886.
- Phyogenes fossilifrons**, association, roots, plant diseases, pathogens, +*Cronartium ribicola* blister rust, *Pinus monticola*, USA, Idaho 8182.
- Plaintains**, +pork, mofongo, freezing, *Staphylococcus aureus* survival 7859.
- Plant breeding**, *Agrobacterium tumefaciens* crown gall, disease resistance, *Vitis amurensis* x *Vitis vinifera* 8006.
Arachis hypogaea, disease resistance, *Cylindrocladum cotleariae* root rot 1171.
Ascochyta pinodella blight disease resistance, inheritance, *Pisum sativum* 5477.
association *Hordeum vulgare* disease resistance, genetic analysis, powdery mildew 8081.
Avena sativa, disease resistance genetic screening, *Puccinia coronata* 5489.
barley yellow dwarf virus disease resistance, inheritance, *Avena sativa* x *Avena stalis* 8072.
Botrytis allii root disease resistance, *Allium cepa* 5479.
Carthamus tructoria, disease resistance screening projects, *Phytophthora cryptogea* 7188.
Ceratocystis ulmi Dutch elm disease, disease resistance, *Ulmus* 8186.
Cicer arietinum, *Ascochyta rabiei* blight disease resistance screening projects 3863.
Cicer arietinum, disease resistance, blight, *Ascochyta rabiei* 3864.
Cicer arietinum, disease resistance, blight, *Ascochyta rabiei* 3865.
cross-breeding, cultural characteristics, *Agaricus bisporus* 8694.
cucumber mosaic virus disease resistance, *Nicotiana tabacum*, Taiwan 5480.
cultivars, disease resistance, Pierce's disease, *Vitis vinifera* 8068.
cultivars, disease resistance, Pierce's disease, yield, *Vitis vinifera* 8064.
Cylindrocladum cotleariae, black rot, virulence, *Arachis hypogaea* genotypes comparison 8084.
disease control, plant diseases, books 1692.
disease resistance 2856.
disease resistance, Africa, conferences, books 9349.
disease resistance, *Ascochyta rabiei* blight, germplasm screening, *Cicer arietinum* 8093.
disease resistance, *Cajanus cajan* 8899.
disease resistance, coffee berry disease, *Colletotrichum coffeanum*, *Coffea arabica* 2873.
disease resistance, *Colletotrichum lagenarium* anthracnose, *Fusarium oxysporum* wilt, cultivars, *Citrus latifolia* 8305.
disease resistance, conferences 3396.
disease resistance, crops 2875.
disease resistance, crops 8893.
disease resistance, crops, biometrics 2867.
disease resistance, developing countries, *Solanum tuberosum* 2874.
disease resistance, downy mildew, cultivars, *Lactuca sativa* 8901.
disease resistance, Dutch elm disease, blister rust, canker, *Ulmus*, *Pinus*, *Cypripedium sempervirens* 2870.
disease resistance, epidemiology, host-pathogen interactions, crops 2866.
disease resistance, *Erysiphe graminis* f.sp. *hordei*, powdery mildew, Denmark, *Hordeum vulgare* 2880.
disease resistance, *Erysiphe graminis* f.sp. *hordei*, powdery mildew, germplasm, *Hordeum spontaneum* 5496.
disease resistance, *Erysiphe graminis* f.sp. *tritici*, powdery mildew, *Triticum*

Plant breeding, (continued)

aestivum 8067.
 disease resistance, etiology, plant diseases 1184.
 disease resistance, fungi, bacteria, viruses, Glycine max 5473.
 disease resistance, Fusarium oxysporum f.sp.iseioidis, wilt, Elaeis guineensis 2871.
 disease resistance, Fusarium wilt, Meloidogyne infection, Lycopersicon esculentum 2864.
 disease resistance genes, host-pathogen interactions, virulence genes, races, Puccinia graminis, Puccinia recondita, stem rust, Triticum aestivum 2858.
 disease resistance, Gibberella zeae, ear rot, zearalenone, 4-deoxynivalenol, production, hybrids, Zea mays 1180.
 disease resistance, glume blotch, Septoria nodorum, Triticum aestivum 2833.
 disease resistance, Hemileia vastatrix, leaf rust, genotype-environment interactions, host-pathogen interactions, Coffea arabica, Coffea canephora 2872.
 disease resistance, host-pathogen interactions, genotype-environment interactions, reviews, crops 2868.
 disease resistance, host-pathogen interactions, powdery mildew virulence, varieties, Hordeum vulgare 2862.
 disease resistance, host-pathogen interactions, reviews 3871.
 disease resistance, leaf streak, Mycosphaerella fijiensis, Plantago major 8077.
 disease resistance, maize dwarf mosaic virus, field trials, Zea mays 5495.
 disease resistance, microorganisms, research programs 1176.
 disease resistance, models 2859.
 disease resistance, models, smut, Hordeum vulgare 2857.
 disease resistance, Oryza sativa 2881.
 disease resistance, Oryza sativa 8896.
 disease resistance, phytopathogenic fungi, host-pathogen interactions, genotype-environment interactions, crops 2865.
 disease resistance, phytopathogenic fungi, host-pathogen interactions, Vitis vinifera, Coffea, Cocos, Ficus carica 2869.
 disease resistance, phytopathogenic fungi, Pennisetum americanum 8894.
 disease resistance, Phytophthora cryptogea root rot, Alternaria carthagenae leaf blight, Carthamus tinctorius 6296.
 disease resistance, plant diseases 1187.
 disease resistance, plant diseases 1189.
 disease resistance, plant diseases 1190.
 disease resistance, plant diseases, cost-benefit analysis 1191.
 disease resistance, potato virus X, varieties, Solanum tuberosum 8884.
 disease resistance, powdery mildew, sporulation, measuring techniques, selection, Secale cereale 2827.
 disease resistance, powdery mildew, Triticum aestivum, correlation triadimefon disease control, Erysiphe graminis 5502.
 disease resistance, Pseudomonas syringae pv.tomato, speck, cultivars, Lycopersicon esculentum 1179.
 disease resistance, Pseudomonas syringae tabaci wildfire, Alternaria alternata brown spot, inheritance, callus culture, Nicotiana tabacum 317.
 disease resistance, Puccinia graminis f.sp.secalis, rust, Hordeum vulgare 8073.
 disease resistance, research programs, Brazil, Triticum aestivum 2878.
 disease resistance, reviews 2883.
 disease resistance, reviews 4275.
 disease resistance, reviews 8095.
 disease resistance, reviews 8892.
 disease resistance, Rhynchosporium secalis scald, Erysiphe graminis powdery mildew, Helminthosporium teres net blotch, Hordeum vulgare 316.
 disease resistance, rice dwarf virus, Oryza sativa 7202.
 disease resistance, rust, research programs, Triticum aestivum 2876.
 disease resistance, sorgh, Kabatiella caulivora, varieties, Medicago 6291.
 disease resistance screening projects, isoenzymes 3872.
 disease resistance, selection, Fusarium root rot, Trifolium pratense 6292.
 disease resistance, Sorghum 8897.
 disease resistance, Sphaerotheca pannosa mildew, Diplocarpon rosae black spot, Rosa 8096.
 disease resistance, tobacco etch virus, potato virus Y, pepper mottle virus, cultivars, Capsicum annuum 8909.
 disease resistance, tropical environment, long-term effects, crop protection, agricultural ecosystems 1177.
 disease resistance, Uromyces phaseoli, rust, Phaseolus vulgaris 3857.
 disease resistance, Uromyces viciae-fabae, rust, Vicia faba 2882.
 disease resistance, USA, crops 2879.
 disease resistance, Ustilago nuda var.tritici, loose smut, Triticum aestivum, Triticale 1183.
 disease resistance, Verticillium dahliae wilt, Lycopersicon esculentum 2068.
 disease resistance, Vigna unguiculata 8898.
 disease resistance, wilt, Pseudomonas solanacearum, root rot, Phytophthora capsici, Capsicum annuum, Capsicum frutescens 8094.
 disease resistance, Xanthomonas campestris pv.malvacearum, blight, Gossypium hirsutum 2832.
 disease resistance, Xanthomonas campestris pv.manihoti, blight, Elaeis brasiliensis infection, cultivars, Manihot cultiva 5497.
 disease resistance, Xanthomonas campestris, spot, Capsicum annuum 8903.
 disease resistance, yellows, Pennisetum clandestinum 294.
 disease resistance, Zambia, Triticum aestivum 2877.
 disease resistance, USA, crops 8895.
 Erwinia amylovora disease resistance, plant breeding, cultivars, Pyrus communis 8062.
 Fusicum moniforme infection, seeds, disease resistance, Zea mays 8074.
 gene frequency, disease resistance, Hordeum vulgare 2863.
 genetic engineering, disease resistance, plant diseases 1186.
 germplasm, disease resistance, Brassica campestris 8065.
 germplasm, disease resistance, Erwinia carotovora, soft rot, Solanum tuberosum 7210.
 germplasm, disease resistance, plant diseases 1185.
 Glycine max, disease tolerance heritability, rot, Phytophthora megasperma f.sp.glycinea 8085.
 Glycine max, disease tolerance selection, rot, Phytophthora megasperma f.sp.glycinea 8079.
 Hemileia vastatrix rust disease resistance, Coffea arabica 6289.
 Hordeum spontaneum, enzyme polymorphism correlation powdery mildew disease resistance, Erysiphe graminis f.sp.hordei 7209.
 Hordeum vulgare, disease resistance, barley yellow mosaic virus 4569.
 inheritance, disease resistance, Erysiphe cichoracearum, powdery mildew, host-pathogen interactions, Cucurbita moschata 3862.
 inheritance, disease resistance, leaf rust, Secale cereale 8907.
 inheritance, disease resistance, screening, Agrobacterium tumefaciens crown gall, Vitis amurensis x Vitis vinifera 8908.

Plant breeding, (continued)

inheritance, nodulation, Rhizobium, nitrogen fixation, Medicago sativa 2979.
 Lycopersicon esculentum, genetic analysis, disease resistance screening projects, speck, Pseudomonas syringae pv.tomato 5482.
 Malus pumila, disease resistance, Venturia inaequalis scab 2835.
 Medicago sativa, disease resistance, Phoma medicaginis black stem 4572.
 Medicago sativa, selection, disease resistance, Sclerotinia trifoliorum plant diseases 5485.
 meristem tip culture, plant viruses, Solanum tuberosum 3858.
 meristem tip culture, plant viruses, tissue culture, Solanum tuberosum 3859.
 Mosa, sigatoka disease resistance, Mycosphaerella fijiensis var.diffusa 3870.
 nitrogen-fixing bacteria, genetic engineering, plants, books, conferences 4243.
 nitrogen-fixing bacteria, mycorrhizas, biotechnology, books 9339.
 Oryza sativa, disease resistance, blight, Xanthomonas campestris pv.oryzae 6298.
 Persica, powdery mildew disease resistance, genetic analysis, Sphaerotheca pannosa var.persae 4570.
 Phaseolus vulgaris, halft blight disease resistance genes, Pseudomonas phaseolicola 5481.
 Pisum sativum, disease resistance, root rot, Aphanomyces eutiches, stem rot, Rhizoctonia solani 2852.
 powdery mildew disease resistance, Hordeum 2839.
 protoplasts, disease resistance, plant viruses 3766.
 Prunus persica, disease resistance screening projects, inoculation methodology, Cytospora leucostoma 5487.
 Puccinia striiformis stripe rust disease resistance, inheritance, Triticum 5476.
 Ribus idaeus, disease resistance, inheritance, Botrytis cinerea, Diymella applanata 3869.
 seedlings, growth, Sphaerotheca pannosa powdery mildew disease resistance, plant breeding, Rosa multiflora 8904.
 Solanum, disease resistance, plant viruses 2837.
 Solanum tuberosum, blackleg disease resistance screening projects, Erwinia carotovora subsp.atroepica 5483.
 speck, Xanthomonas campestris pv.vesicatoria, disease resistance, cultivars, Lycopersicon 2829.
 tobacco etch virus disease resistance, cultivars, Capsicum annuum 8902.
 Triticum aestivum, disease resistance, brown rust, Puccinia tritica 5486.
 Triticum aestivum, virulence genes, stem rust, Puccinia graminis f.sp.tritici 4239.
 urticaria leaf crinkle virus disease resistance, Vigna radiata 2071.
 vegetables, disease resistance, plant viruses 3856.
 Vicia faba, disease resistance screening projects, bean yellow mosaic virus 3873.
 Vigna unguiculata, nitrogen fixation 1271.
 wheat mosaic virus disease resistance screening projects, seedlings, Triticum aestivum 4574.
 wilt, Verticillium wilt, cultivars, Lycopersicon esculentum 1178.
 Xanthomonas campestris pv.malvacearum, blight, Gossypium hirsutum, reviews 3846.

Plant cells,
 cell culture, biotechnology, books 5091.
 cell surface interaction, crown gall, Agrobacterium tumefaciens 8854.
 monosaccharides, phytopathogenic fungi host-pathogen interactions, in vitro growth 7125.

Plant debris,
 litter decomposition, humus production, Pinus pumila, microorganisms 3952.

Plant diseases,
 abutition mosaic virus, Abutition, seasonal variations, chloroplasts ultrastructure 4541.
 Agrobacterium, diagnosis, characterization 3778.
 alfalfa mosaic virus, Vicia faba, Alette effects on pathogenesis 4591.
 avocado sunblotch disease viroid, Persea americana, detection, electrophoresis 4525.
 bacteria, Australia 3769.
 bacteria, diagnosis 3780.
 bacteria, diagnosis, books 4235.
 bacteria, identification, phage typing 3770.
 bacteria, research programs 1100.
 barley yellow dwarf virus, susceptibility, Zea mays 4513.
 Basidiomycetes, pathogenesis, Zea mays, Arachis hypogaea, Glycine max, Phaseolus vulgaris 1111.
 beet mosaic virus, Beta vulgaris, etiology, Albania 6258.
 beet western yellows virus, Beta vulgaris, Lactuca sativa, Brassica, Israel 4539.
 Beta vulgaris, roots, plant viruses, vectors, Polymyxa betae, British Isles 7190.
 biological control, soil microorganisms, Myxobacterales, lysis, Rhizoctonia solani hyphae, Cochliobolus miyabianus conidia 8920.
 characterization, Erwinia amylovora, Erwinia herbicola, diagnosis 3776.
 chemical control, epidemiology mathematical models, reviews 4496.
 Cochliobolus victoriae conidia, virulence, soil 1090.
 conferences 7643.
 conferences 7644.
 conferences, bacteria, viruses, phytopathogenic fungi 9350.
 Coniferales, fungi effects on growth, USSR 5603.
 cooling water sprays effects on 6219.
 Corynebacterium, diagnosis, characterization 3777.
 Corynebacterium michiganense subsp.michiganense, identification, Lycopersicon esculentum cotyledons lesions 1158.
 Corynebacterium sepedonicum, immunodiagnosis, fluorescent antibody test, books 3385.
 cowpea middle mottle virus, Glycine max, ultrastructure, leaves cells 4505.
 cowpea mild mottle virus, Arachis hypogaea, epidemiology 6235.
 cowpea severe mosaic virus serotypes, Vigna unguiculata 6224.
 crop protection, biological control, books 8494.
 crops, viruses, control, ecological evaluation, reviews 3764.
 crops, weather projections 1098.
 crops, yield reduction 1092.
 crops, yield reduction 1093.
 crops, yield reduction 1094.
 crops, yield reduction, mathematical models, conferences 849.
 diagnosis, immunofluorescence, Erwinia amylovora 2773.
 diagnosis, radioimmunoassay, monoclonal antibodies, hybridoma, soybean mosaic virus, lettuce mosaic virus, maize dwarf mosaic virus 4998.
 disease control, agricultural practices, biological control 1188.
 disease control, cost-benefit analysis, research programs 1192.
 disease control, management 1216.
 disease control, mathematical models 1105.
 disease control, research programs, international organizations 1194.
 disease resistance, germplasm, plant breeding 1185.
 disease resistance inducers 4571.

Plant diseases, (continued)

- disease resistance, plant breeding 1187.
disease resistance, plant breeding 1189.
disease resistance, plant breeding 1190.
disease resistance, plant breeding, cost-benefit analysis 1191.
disease resistance, plant breeding, genetic engineering 1186.
disease resistance, segregation, genes 4579.
disease spread, disease control, quarantine 1193.
disease spread, measuring techniques, computer applications, remote sensing, video imaging 236.
disease spread, phytopathogenic fungi, computer applications 6220.
disease transmission, airborne microorganisms, conferences 6797.
epidemics, relationship biological control, weed control 3890.
epidemiology, air spora, samplers 804.
epidemiology, climate, meteorology 1095.
epidemiology, disease control, plant breeding, books 1692.
epidemiology, environmental factors 1097.
epidemiology, growth models 1107.
epidemiology, mathematical models 8766.
epidemiology, monitoring, meteorology 1110.
Erwinia amylovora, detection, immunoassays 5441.
Erwinia amylovora, Rosa belgium 5461.
Erwinia carotovora subsp. atroseptica, detection, enzyme immunoassay 5464.
Erysiphe graminis f.sp. hordei, host-pathogen interactions, relative humidity effects on 1962.
etiology, disease resistance, plant breeding 1184.
field trials, fungi, inoculum media (culture) 5400.
Fragaria, fungi, viruses, books 1687.
fungi, control, reviews 2843.
fungi, epidemiology, diagnosis, pathology 1101.
fungi, prophylaxis, disease control, fungicides foliar applications, Glycine max, USA, Georgia 8118.
Helianthus, yield reduction, mechanisms, mathematical models 237.
fungicides, antibiotics, disease control 1221.
fungicides, disease control 1215.
fungicides resistance, phytopathogenic fungi, mathematical models 439.
Fusarium, chlamydospores, role, survival, pathogenesis, reviews 7189.
Fusarium, mycotoxins, reviews, books 7649.
Fusarium oxysporum, mixed infection, sunn hemp mosaic virus, pathogenesis, Vigna unguiculata, scanning electron microscopy 6236.
Fusarium, Solanum tuberosum, effects on yield 7173.
Fusarium, Solanum tuberosum, incidence, Finland 7171.
Fusarium tabacinum, pathogenicity, host range, Australia 7126.
Gaetanomyces graminis var. tritici, continuous culture, factor affecting pathogenicity 1091.
Glycine max, phytopathogenic fungi, disease control, pesticide applications association rainfall 1220.
Gossypium hirsutum, herbicides effects on, Rhizoctonia solani, Fusarium oxysporum f.sp. vasinfectum 7963.
grapevine Bulgarian latent virus, antigenic variants, characterization 5451.
grapevine leaf roll virus, Vitis vinifera, growth, yield 4536.
grapevine virus A, Vitis vinifera, disease transmission, vectors, Pseudococcus longispinus 3844.
groundnut rosette virus, detection, Arachis hypogaea 4504.
guinea grass mosaic virus, Pennisetum americanum, etiology, Ivory Coast 4512.
Helianthus annuus, Sclerotium rolfsii, biological control, Trichoderma harzianum 4566.
Helianthus tuberosus, effects on yield, Puccinia helianthi, Erysiphe chiochlearum, Sclerotium rolfsii 5457.
hop stunt disease virus, Cucurbitaceae, pathogenesis 4543.
hop stunt disease virus, Humulus lupulus, disease reservoirs, epidemiology 4545.
host-pathogen interactions, Alternaria toxins, reviews 5393.
host-pathogen interactions models, computer applications 3767.
host-pathogen interactions, reviews 4494.
host-pathogen interactions, specificity 1102.
host-pathogen interactions, virulence 8765.
immunodiagnosis, plant viruses, comparison, methodology 7915.
Imperata, Gibberella imperatae sp. nov., characterization 7950.
integrated control 1217.
Marssonina, Populus, pathogenesis 5596.
microorganisms, diagnosis, genetic engineering, electrophoresis, monoclonal antibodies, methodology 7921.
microorganisms, ecosystem analysis, isolation, media (culture), measuring techniques, reviews, books 5082.
microorganisms, virulence, pathology, reviews 4492.
molds, Gramineae, reviews 5430.
mycoplasma-like organisms, isolation, enzymes digestion 281.
Myosphaerella filijensis, fungicides, disease control, Musa sapientum, Musa paradisica 8914.
mycotoxins, role, Fusarium, reviews 7100.
okra mosaic virus, epidemiology, Abutilon hirtum, Sida acuta, Malvastrum coromandelianum, Physalis angulata 6262.
papaya leaf reduction virus, Carica papaya, biochemical characteristics association pathogenesis 8812.
papaya mosaic virus, Carica papaya, etiology 4524.
patch, surveys, soils (calcareous) 255.
pathogenesis, microorganisms 4493.
pathogenicity, Macrophomina phaseolina, fungicides effects on 7211.
pathogenicity, Spiroplasma 4498.
pathogens, bacteria, identification 3779.
pathogens, biological control, bacteria, fungi, plant viruses 4231.
pathogens, check lists, phytopathogenic fungi, bacteria, plant viruses, Brunei, books 7640.
pathogens host range, geographical distribution, Seychelles 5398.
pathogens, pollution effects, acid rain 7920.
pathogenesis 1103.
phytopathogenic fungi, bacteria, inoculation, spraying 2771.
phytopathogenic fungi, disease resistance, host-pathogen interactions, mathematical models, population density 2772.
phytopathogenic fungi, mathematical models, disease spread 7127.
Phytophthora, antifungal activity, phosphorous acid, fosfite-AI 8124.
phytooxins, role 6222.
Pisum sativum, association nutrient dynamics 5601.
Pisum sativum, cucumber mosaic virus, bean yellow mosaic virus, amino acid composition 6227.
plant viruses, antiviral activity, foliar application, plant extracts,

Plant diseases, (continued)

- Clerodendrum 5535.
plant viruses, tissue culture, disease control 5397.
plant viruses, tropical environment 1965.
population genetics, evolution, host-pathogen interactions 1106.
potato virus Y, disease transmission, Myzus persicae, β -naphthene derivatives effects on 5401.
potato virus Y, pathogenesis, Solanum nigrum var. judaicum 6263.
predictions 1104.
Pseudomonas, diagnosis, characterization 3774.
Pseudomonas solanacearum, soil, population dynamics 6218.
Pseudomonas syringae, toxins biosynthesis 6209.
Pseudomonas syringae, variants, pathogenesis 3773.
Pseudomonas, Triticum aestivum roots, susceptibility 6242.
Pythium aphanidermatum, biological control, Trichoderma harzianum 4589.
rainfall, spores dispersal, Pseudocercospora heliothricoides, Pyrenopeziza brassicae 1109.
remote sensing 1096.
Rickettsia-like organisms, mycoplasma-like organisms 3771.
roots, Persea americana, metalaxyl, fosfite-AI, antifungal activity, Phytophthora cinnamomi 8923.
Rosa, books 1686.
Saudi Arabia, bacteria, phytopathogenic fungi, plant viruses 5399.
Sclerotinia trifoliorum, disease resistance, selection, Medicago sativa 5485.
Septoria sparguei, Pyrenophora tritichostoma, Cochliobolus sativus, incidence, Elymus lurceus 1134.
soil fungitaxis, suppression, reviews 8764.
soil-borne diseases, biological control, suppressive soils 330.
soil-borne diseases, disease control, suppressive soils 332.
Solanum tuberosum, bacteria, fungi, viruses, books 3380.
Solanum tuberosum, fungicides, soil amendment, disease control, Verticillium dahliae, Globoderma rostochiensis 8121.
Solanum tuberosum, Rhizoctonia solani, biological control, Verticillium biguttatum 5514.
tobacco mosaic virus, Nicotiana tabacum, inhibitors, antiviral activity 4575.
tobacco mosaic virus, ribonucleoproteins, role, disease transmission, characterization 8862.
tomato yellow leaf curl virus, cytology, Lycopersicon esculentum 4542.
tomato virus, Lycopersicon esculentum, Palaragonum 4540.
Trifolium subterraneum, Heterodera daveri, interaction, Fusarium avenaceum, Fusarium oxysporum 5411.
tungro virus, Oryza sativa, pathogenesis, yield 4514.
turggrass, phytopathogenic fungi, books 1688.
Typhula incarnata, monkardias, morphology, infectivity, phytotoxicity 2770.
Verticillium dahliae pathogenicity, sclerotia characterization 2023.
Verticillium dahliae, Solanum tuberosum, roots growth 5460.
Vicia faba, books 4236.
viruses 7919.
virulence, Geotrichum candidum, extracellular enzymes activity 7128.
viruses, Citrus macrophylla, Glomus etunicatus symbiosis effects on pathogenesis 4635.
viruses, etiology, pathology, Phaseolus limensis 8775.
viruses, research programs 1099.
watermelon mosaic virus, Cucumis sativus, Lagenaria siceraria, host range, disease transmission, Morocco 6270.
Xanthomonas, pathogenesis, variants 3772.
yellow mosaic virus, Phaseolus aureus, disease control, vectors, Aleyrodidae 3878.
yield reduction, mathematical models, predictions 238.
yield reduction, mathematical models, remote sensing, world 261.
yield reduction, predictions, measuring techniques, mathematical models, crop 8439.
zucchini yellow mosaic virus, Cucumis sativus, Lebanon 4544.
zucchini yellow mosaic virus, Cucurbitaceae, USA 6269.
- Plant extracts,**
Citrusulocynolthis, Corchorus depressus, Fagonia cretica, Lycium barbarum, antimicrobial activity 8339.
- Plant viruses,**
antiviral activity, Clerodendrum plant extracts, foliar application, plant diseases 5535.
antiviral agents, effects on 4024.
binding, enzyme-linked immunosorbent assay methodology 8440.
detection, immunoelectron microscopy methodology, gold+immunoglobulin G complex 8439.
disease resistance plant breeding, Cajanus cajan 8899.
disease resistance, plants, interferon like compounds 4573.
disease resistance, Solanum, plant breeding 2837.
disease resistance, vegetables, plant breeding 3856.
disease transmission, Nematoda vectors 6217.
disease transmission, vectors, Delphacidae, Cicadellidae 7130.
fruit trees, books, conferences 344.
host-pathogen interactions, plants genomes, structure-activity relationships, books, conferences 3391.
hydrangea mosaic virus, isolation, Hydrangea macrophylla, antigenic characteristics 2017.
immunodiagnosis, plant diseases, comparison, methodology 7915.
infection, diagnosis, spot hybridization, crops 7924.
infection, effects on Rhizobium nodulation, nitrogen fixation, Leguminosae, reviews 8780.
infection, Leguminosae 6238.
infection, protoplasts, methods 3765.
infection, Scaphytopius cautus disease transmission, buds proliferation, Glycine max USA, Louisiana 4510.
infection, Vigna radiata, Vigna mungo, metabolites concentration 2776.
infection, Vigna unguiculata, incidence, USA, South Carolina 8777.
Leguminosae, enzyme-linked immunosorbent assay detection 7927.
maintenance, symptoms, distribution, Solanum tuberosum seedlings 8865.
Malus, infection, long-term effects 6250.
meristem tip culture, Solanum tuberosum 3858.
meristem tip culture, Solanum tuberosum 3859.
olive latent ringspot virus, infection, Olea europea, characterization 2016.
Oryza sativa, antigens, detection, latex agglutination 5416.
pathogens, plant diseases, biological control, books 4231.
plant diseases, check lists, Brunei, books 7640.
plant diseases, disease resistance inducers 4571.
plant diseases, pathogenesis, reviews 4493.

Plant viruses, (continued)

- plant diseases, Saudi Arabia 5399.
plant diseases, tissue culture, disease control 5397.
plant diseases, tropical environment 1965.
plants, books, conferences 4243.
Polymyxa betae vectors, plant diseases, roots, Beta vulgaris, British Isles 7190.
potexvirus, host range, infectivity, characterization 234.
protoplasts, disease resistance, plant breeding 3766.
quantitation, enzyme-linked immunosorbent assay methodology 8445.
Ribes, Finland 6268.
RNA replication, actinomycin D sensitivity, Vigna unguiculata leaves infection 7931.
Rubus idaeus, North America 6266.
vectors, Helicoverpa, Cicadellidae, disease transmission 7157.

Plantago lanceolata,

- Fusarium moniliforme var. subglutinans infection, spatial distribution, relationship, incidence 7192.
rhizosphere microorganisms, community composition, mixed culture, Lolium perenne, trifolium repens 372.

Plantago major,

- plant breeding, disease resistance, leaf streak, Mycosphaerella fijiensis 8077.

Plantations,

- Coffea arabica, eyespot, anthracnose, Cercospora coffeicola, shading, rainfall, seasonal variations 273.
ectomycorrhizas, fruit bodies formation, environmental factors, Suillus luteus, Pinus radiata 5571.
ectomycorrhizas inoculation, Quercus robur, Quercus petraea 7220.
Hevea, denitrification, soil 6356.
Juglans cinerea, Sirococcus clavigeni-juglandacearum canker disease spread, pathogenicity 7991.
Juglans nigra, anthracnose epidemics incidence, USA, Illinois 7995.
leaf litter decomposition, nutrient cycles, soil microorganisms, Coffea arabica 5624.
Pinus, Heterobasidium annosum, genetic markers, mating types, epidemiology 367.
vesicular-arbuscular mycorrhizas population levels, roots colonization, Coffea arabica 5626.

Planting,

- damping off, effects on, yield, Cephalosporium gramineum, stripe, USA, Kansas, Triticum aestivum 7974.
seedlings, inhibition ectomycorrhizas, Picea sitchensis 5566.
seeds, Bradyrhizobium japonicum inoculation, nodulation, Glycine max 6352.
timing, effects on Sclerotinia sclerotiorum, stem rot, wilt, Cicer arietinum 5412.

Planting density,

- Hordeum vulgare, crop fields, relationship barley yellow dwarf virus incidence 255.
paddy fields, vertical distribution, rhizosphere microorganisms, nitrogen-fixing bacteria, nitrogenase, Oryza sativa 7281.
time, effects on, leafspot, Cercospora canescens, pathogenesis, Phaseolus mungo 7929.

Plantlets,

- Alnus glutinosa, nodulation, Frankia 4601.

Plants,

- artificial symbiosis, L form bacteria 6345
Aulacothum solani, hybridization analysis, detection, subterranean clover red leaf virus, methodology 4151
blight, Xanthomonas campestris pv. malvacearum, pathogenicity 7923.
cell walls digestion, rumen microorganisms, reviews 3669.
crown gall, opines utilization, Pseudomonas, Agrobacterium tumefaciens 7131.
crown gall, silver nitrate staining tumors, Agrobacterium tumefaciens 4534.
crown gall tumors induction, role, Agrobacterium tumefaciens cell surface carbohydrates 4786
disease resistance, cross-protection, induction resistance, reviews 5484.
disease resistance, interferon like proteins 6288.
disease resistance, plant viruses, interferon like compounds 4573.
disease resistance, proteinase inhibitors, phytoalexins 8900.
essential oils, effects on, yeasts, association, heat shock 3064.
Frankia infection, actinorhizas, herbicides effects on 2123.
frost, ice nucleation bacteria 4556.
genetic engineering, nitrogen-fixing bacteria, plant breeding, books, conferences 4243.
genomes, structure-activity relationships, nitrogen fixation, nitrogen-fixing bacteria, plant viruses, host-pathogen interactions, books, conferences 3391.
growth regulators, effects on Azospirillum 7272.
growth regulators, production, Fusarium 3944.
host specificity, mycorrhizas, characterization 8974.
host-pathogen interactions, bacteria, reviews 4497.
ice nucleation, bacteria 3781.
inoculum potential, competition, Gigaspora decipiens, Glomus fasciculatum, Glomus intraradices 8973.
inoculum potential, Glomus tenue, Glomus fasciculatum, Gigaspora decipiens 8972.
interaction, nitrogen-fixing bacteria, nitrogen fixation, biochemical characteristics, genetic control, books 3346.
interaction, Rhizobium, nitrogen fixation, reviews 4659.
lectins binding, actinorhizas, Frankia 4602.
microorganisms symbiosis, nitrogen fixation measurements, soil diffusion 411.
mycorrhizas symbiosis, ionizing radiation effects on 8978.
nitrogen fixation, measuring techniques, association gases diffusion, plastics 2949.
nitrogen fixation, symbiosis, actinorhizas 9009.
nitrogenase activity measuring techniques, soil microorganisms 1276.
nutrient uptake, rhizosphere microorganisms, mycorrhizas 5627.
pathogenicity, Fusarium oxysporum f.sp. cubense, methodology 3768.
pathogens, bacteria, hormones, mediation, tumorigenesis 8856.
pathogens, biological control, books 844.
pathogens, Nematoda, interaction, endomycorrhizas, reviews 392.
Pellissium punctatus incidence, USA, North Dakota 3838.
Phomopsis asymptomatic infection, taxonomic significance 7129.
phytoethogenic lung diseases, India, conferences 2547.
population dynamics, Rhizobium japonicum 1272.
powdery mildew, Erysiphe, epidemiology, spectrophotometry 7917.
protoplasts, plant viruses infection, models 3765.
response association vesicular-arbuscular mycorrhizas, environmental effects, reviews 390.
response, mycorrhizas, books 643.
rhizosphere, interaction, microorganisms, characterization, reviews 4627.

Plants, (continued)

- roots, Bradyrhizobium japonicum attachment mechanisms, capsules polysaccharides 7275.
roots, ectomycorrhizas symbiosis, measuring techniques, reviews 832.
roots, mycorrhizas, reviews 5647.
roots pathogens, fungi, interaction, ectomycorrhizas, reviews 393.
roots, vesicular-arbuscular mycorrhizas infection, statistical analysis 1254.
roots, vesicular-arbuscular mycorrhizas, measuring techniques, reviews 825.
seedlings, infection, Rhizoctonia solani, Pithium debaryanum, disease control, cyanamide 3886.
soft rot, Erwinia carotovora, characterization 3775.
soil microorganisms, powdery mildew disease control fungicides effects on 2078.
symbiosis, mycorrhizas, books 3382.
tissues, protoplasts, tobacco mosaic virus RNA detection, hybridization analysis, enzyme-linked immunosorbent assay 4499.
tobacco mosaic virus infection, hypersensitive response, proteins analysis 7916.
toxins, effects on biodegradation, microorganisms 8970.
Uromyces phaseoli infection, appressoria formation, factors affecting 1964.
vesicular-arbuscular mycorrhizas determination, Argentina, soil types association 3939.
vesicular-arbuscular mycorrhizas inoculation, methodology, reviews 827.
vesicular-arbuscular mycorrhizas symbiosis effects on, measuring techniques, reviews 389.
viroids, viruses, detection, electrophoresis methodology 4152.
white rot, Sclerotium cepivorum, host range 1156.
- Plaque assay,**
black beetle virus 7559.
bovine rhinotracheitis virus, tissue culture systems 4155.
development, viruses infection, Chlorella coli culture 592.
immunoperoxidase, methodology, Africa swine fever virus antibodies detection 634.
phages detection, Escherichia coli, methodology, water 2403.
rotavirus (bovine) 6735.
Sindbis virus 632.
use, methylcellulose media, murine leukemia virus 2444.
viruses, use, tetrazolium blue staining 9275.
- Plaques,**
foot-and-mouth disease virus, characterization, vaccines production 3183.
formation, dengue virus infectivity assays, cell lines 6450.
phage A, use, screening, antigens 624.
- Plasma membranes,**
bacteroids, Rhizobium, role nitrogen fixation, nodules, Leguminosae 2976.
Dictyostelium discoideum, isolation methodology 4224.
energy metabolism, active transport, sodium dodecyl sulfate inhibition, Enterobacter cloacae 7549.
ergosterol effects on, miconazole antifungal activity, Candida albicans 4757.
glycoproteins receptors, Bacillus thuringiensis subsp. kurstaki δ -endotoxin binding, cytotoxicity, Christoneura fumiferana 5387.
mycolaminar receptors, Phytophthora, stimulation phytoalexins production, Glycine max 2075.
role antibiotic resistance, colistin, protoplasts, liposomes, Bacillus colistinus 9074.
spin probes, immunoassays, detection, Neisseria meningitidis antibodies 3325.
triptycyl polyoxins transport, antifungal activity, Candida albicans 458.
vacuoles formation, miconazole, antifungal activity, Trichophyton mentagrophytes 1916.
- Plasmids,**
analysis, Salmonella typhimurium, phage typing, drug resistance patterns, clinical isolates 4690.
analysis, Serratia marcescens antibiotic resistance 4000.
antibiotic resistance, gentamicin, transposion, Staphylococcus aureus 9066.
antibiotic resistance, Klebsiella pneumoniae, conjugation, Serratia marcescens 4716.
antibiotic resistance, Lactobacillus helveticus, Lactobacillus bulgaricus 2202.
antibiotic resistance mediation, Salmonella typhi, chloramphenicol, trimethoprim, ampicillin 7322.
bacteria, genetic markers, culture collections, computer programs 756.
bacteria, isolation, methodology 8479.
bacteria, screening methodology 745.
biodegradation, ethylbenzene, 1-phenylethanol, Pseudomonas fluorescens 4425.
Cytrobacter, gene products, β -lactamase purification, characterization 26.
cloning vectors, DNA integration methodology 628.
cloning vectors, gene expression 3403.
Clostridium difficile, correlation, antibiotic sensitivity testing, toxigenicity 1372.
Cochliobolus heterostrophus DNA, isolation methodology 3365.
correlation, antibiotic resistance, aminoglycoside antibiotics, Mycobacterium fortuitum 7342.
culture, temperature effects on, lactose fermentation, identification, media (culture), Streptococcus lactis 7864.
deficiency, erythromycin, tetracycline antibiotic resistance genetic markers, conjugation, Streptococcus pyogenes 6426.
DNA, antibiotic resistance, tetracycline, restriction endonuclease mapping, Haemophilus ducreyi 3027.
DNA, isolation, gel chromatography, Escherichia coli 3539.
DNA, protoplasts transformation, gene transfer, Corynebacterium glutamicum 6059.
DNA, purification, methodology 741.
DNA, purification methodology, Escherichia coli 4194.
DNA purification methodology, Escherichia coli 7598.
DNA, purification, precipitation, chromatography, methodology 5917.
DNA, Streptococcus group N, isolation, methodology 5026.
DNA, Streptococcus lactis, transformation, lactose metabolism, antibiotic resistance, Streptococcus sanguis 6990.
drug resistance, bacteria, clinical aspects 3995.
drug resistance, incidence, Salmonella garden isolates, bacteria 9072.
drug resistance, Staphylococcus aureus, clinical isolates 4705.
drug resistance, sulfamethoxazole, trimethoprim, urinary tract, clinical isolates, Escherichia coli 2204.
epidemiology markers, Staphylococcus aureus 6782.
Escherichia coli, gene expression, colonization factors, enterotoxins production 1935.
R factor incidence, Salmonella antibiotic resistance 6430.
R factor, nitrofurantoin resistance, Escherichia coli clinical isolates 8294.
R factor RK2, gene transfer, drug resistance, gram-negative bacteria 6428.
R factor, role, antibiotic resistance, Shigella 6438.
R factor R1, transformation, drug resistance, Escherichia coli 7337.
R factor R124, effects on membrane permeability, outer membranes, membrane

Plasmids, (continued)

- proteins, antibacterial agents sensitivity, *Escherichia coli* 4724.
 R factor RT73, homology, R factor F46, arsenic acid, resistance, *Escherichia coli* 3026.
 R factor TP120, transformation, drug resistance, *Escherichia coli* 7337.
 R factors, antibiotic resistance, clinical isolates, *Klebsiella*, *Escherichia coli* 5709.
 R factors, antibiotic resistance, Enterobacteriaceae 4002.
 R factors, antibiotic resistance, *Pseudomonas aeruginosa*, transfer, *Escherichia coli*, clinical isolates, neonates, man 9043.
 R factors, drug resistance, *Klebsiella pneumoniae* 3999.
 R factors, drug resistance, *Vibrio anguillarum* 3989.
 R factors, drugs sensitivity, *Escherichia coli* 5718.
 R factors, electrophoresis, antibiotic resistance, epidemiology, clinical isolates, *Salmonella typhi* 4001.
 R factors, Enterobacteriaceae, antibiotic sensitivity testing, clinical isolates, nosocomial infection 4693.
 R factors, *Escherichia coli* animal isolates, antibiotic resistance, relationship antibiotics, feeds 4003.
 R factors, *Escherichia coli*, antibiotic resistance, dogs isolates 3010.
 R factors, *Escherichia coli* clinical isolates antibiotic resistance correlation 1313.
 R factors, *Escherichia coli*, drug resistance, incidence, animals isolates, clinical isolates 3011.
 R factors, gene transfer, mercury resistance, bacteria, soil microorganisms 5717.
 R factors, incidence, antibiotic resistance, *Escherichia coli*, relationship antibiotics treatment, diarrhea, man 3034.
 R factors incidence, *Escherichia coli*, *Salmonella*, drug resistance patterns 3039.
 R factors, nitrofurantoin reductase, nitrofurantoin drug resistance, *Escherichia coli* 3029.
 R factors, physicochemical properties, antibiotic resistance, *Escherichia coli*, *Shigella sonnei* 4694.
 R factors, plasmid pKMR, antibiotic resistance, *Escherichia coli* 4699.
 R factors, *Pseudomonas*, isolation, antibiotics industrial wastes production, antibiotic resistance 2208.
 R factors, tetracycline antibiotic resistance, *Escherichia coli* 2206.
 R factors, transfer, antibiotic resistance, *Staphylococcus aureus* 9044.
 R factors, transfer, antibiotic resistance, water isolates, *Salmonella*, waste water, surface water 9046.
 gene mapping, aminocyclitol phosphotransferase, antibiotic resistance, hygromycin B, *Escherichia coli* 427.
 genetic transfer, 3-chlorobenzoic acid biodegradation, *Pseudomonas putida* 1008.
 genetic analysis, hydrocarbons biodegradation, reviews, hydrocarbon-degrading bacteria 8284.
 genetic control, aromatic compounds biodegradation, reviews 8279.
 gentamicin antibiotic resistance mediation, *Staphylococcus aureus* 7327.
 heterogeneity, flow cytometry, *Escherichia coli* 662.
 heterogeneity, flow cytometry, *Escherichia coli* 1572.
 hydrocarbons biodegradation, *Pseudomonas aeruginosa* 4683.
 hydrocarbons oxidation, wastewater treatment, role, *Acinetobacter lwoffii* 7309.
 Inc plasmid, physicochemical properties, antibiotic resistance, *Escherichia coli*, *Shigella sonnei* 4694.
 Inc plasmids, antibiotics, effects on, Enterobacteriaceae, antibiotic resistance 6423.
 Inc plasmids, plasmid pKMR, antibiotic resistance, *Escherichia coli* 4699.
 Inc plasmids, R factors, antibiotic resistance, *Shigella sonnei* 4691.
 isolation methodology, *Lactobacillus plantarum* 4170.
 lac plasmid, protoplasm fusion, dairy starters, *Streptococcus lactis* 8702.
 β -lactamase, antibiotic resistance, Enterobacteriaceae 8290.
 Legionella pneumonia, epidemiology, water supplies, Legionnaire's disease 4949.
 linear cloning vectors, construction, yeasts 818.
 nisin antibiotic resistance, phage c2 resistance, transformation, *Streptococcus lactis* subsp. *diacetylactis*, dairy starters 2196.
 plasmid ColE, colicin N biosynthesis, genetic analysis, *Escherichia coli* 4802.
 plasmid pEAP2, *Escherichia coli*, gene expression, *Bacillus* β -lactamase 694.
 plasmid pU1008, *Rhizobium leguminosarum*, effects on, *Rhizobium meliloti*, symbiosis, *Medicago sativa* 4649.
 plasmid pJK3 transfer, *Streptococcus faecium*, bacteriocins, biosynthesis, resistance 1418.
 plasmid pKMR, antibiotic resistance, *Escherichia coli* 4699.
 plasmid pKMR, physicochemical properties, antibiotic resistance, *Escherichia coli*, *Shigella sonnei* 4694.
 plasmid pKM101, antibiotic resistance, *Escherichia coli*, *Salmonella typhimurium*, ampicillin, effects 7324.
 plasmid pKM101 effects on DNA repair, *Salmonella typhimurium*, Ames test 3328.
 plasmid pLP11, *Bacillus licheniformis* transformation, β -lactamase, gene expression, temperature effects on, *Bacillus stearothermophilus* 8543.
 plasmid pLZ64, transformation, genes, lactose metabolism, 6-phospho- β -D-galactosidase, *Lactobacillus casei* 5345.
 plasmid pMG110 elimination, novobiocin role, *Escherichia coli* 5797.
 plasmid pSA effects on Agrobacterium, adherence, virulence 1966.
 plasmid pSN, *Streptococcus lactis*, conjugation, sucrose fermentation, nisin biosynthesis 3146.
 plasmid pT11, transformation, association, mining, *Thiobacillus* 8262.
 plasmid pTIA63, plasmid pTIA6, induction, tumors, comparison, host range 8666.
 plasmid pTp 6-10, cloning vectors, transformation, *Escherichia coli*, tetrahydrofolate dehydrogenase, purification 99.
 plasmid pUB10, plasmid pBC16, transformation, *Bacillus sphaericus*, sporulation, biological control, *Culicoides* 2666.
 plasmid RP4, tetracycline, antibiotic resistance, continuous culture, *Escherichia coli* 7351.
 plasmid 2 μ , use, gene mapping, actin genes, chromosome 6, *Saccharomyces cerevisiae* 6788.
Rhizobium meliloti, role, nodulation, nitrogen fixation, *Medicago sativa*, gene mapping, reviews 4600.
 role tetracycline production, streptomycetes hygroscopicus 3147.
 silver resistance, *Pseudomonas stutzeri*, mines isolates 4698.
 spread, *Staphylococcus* drug resistance, phages role 9070.
 stability, regulation, feedback inhibition, chemostats, methylotrophic bacteria 3023.
Staphylococcus aureus, extraction micromethods 7599.
 Streptococcus, macrolide antibiotics, antibiotic resistance, host range 3025.
 Ti plasmid, opines mediation gene transfer, Agrobacterium tumefaciens, host plants 235.
 Ti plasmid tumorigenesis *Solanum nigrum*, Agrobacterium tumefaciens 2819.
 Ti plasmid vectors, *Rhizobium meliloti* nod gene, gene expression, nodules

Plasmids, (continued)

- formation, Agrobacterium tumefaciens, *Escherichia coli* 6366.
 TOL, plasmid, biodegradation, aromatic hydrocarbons, chlorination, *Pseudomonas cepacia*, *Pseudomonas* 5313.
 TOL, plasmid, pollutants biodegradation, genetic engineering, reviews, bacteria 4435.
 transfer, antibiotic resistance, antibiotic sensitivity testing, reviews, anaerobic bacteria 7335.
 transformation, penicillin amidase, DNA, *Bacillus megaterium*, production 95.
 transmission, antibiotic resistance, gentamicin, Enterobacteriaceae, isolation, waste water 9076.
Vibrio cholerae, gene transfer, antibiotic resistance, clinical isolates, man, India, Tamil Nadu 6400.
 virulence, *Yersinia enterocolitica* 6781.
Plasmodia.
 Pharymum polyccephalum, microfilaments, proteins, isolation, characterisation 5954.
Plasmodiophora brassicae.
 clubroot, antifungal agents, disease control, disease resistance, Brassica 8912.
 clubroot, disease resistance inheritance, Brassica napus, Brassica oleracea 300.
 clubroot, disease resistance, plant breeding, germplasm, Brassica campestris 8065.
 clubroot, inhibition, inoculation, rhizoplane microorganisms, bacteria, *Raphanus sativus* 8867.
 clubroot, solar radiation disease control, Brassica oleracea, Brassica rapa 292.
 detection, irrigation systems sediments, role, Brassica oleracea var. capitata clubroot 3820.
 pathogenicity, Brassica genotypes 1157.
Plasmodium falciparum.
 monoclonal antibodies association, production Epstein-Barr virus transformed cells, lymphocytes B, man, methodology 633.
Plasmodium viticola.
 metalaxyl resistance 3991.
Plastics.
 dental restorative materials, corrosion, *Pseudomonas aeruginosa* 4965.
 films, disease control, autopsy, man 2421.
 fluorine compounds, industrial effluents, wastewater treatment 4898.
 prophylaxis, postoperative infection, bacteria, man 4958.
 surfaces, disinfectants antibacterial activity, *Pseudomonas aeruginosa* 5862.
 tubes, microorganisms films, drinking water 4948.
Platyphena scabra.
 viruliferous control, epizootology, *Nomuraea rileyi* 5214.
Platygodium elegans.
 seeds dispersal, survival, mortality factors, damping-off 1240.
Platyptilia carduactyla.
 pest control, biological control, *Bacillus thuringiensis* subsp. *kurstaki*, + *Neoplectana carposcapae* 5216.
Plectonema boryanum.
 comparison, *Anabaena torulosa*, sodium effects on nitrogen fixation 6381.
Pleistophora similis.
 Simulium ornatum biological control, protein composition, phosphatase activity 2646.
Pleocora drummondii sp. nov.
 Phlox drummondii leafspot etiology, *Stemphylium drummondii* sp. nov. imperfect state 2039.
Plesiomonas shigelloides.
 man, feces, media (isolation) 7592.
Pleuratus.
 fruit bodies production, inoculation, wood 7846.
Pleuratus columbinus.
 culture, fruit bodies production 8697.
Pleuratus cystidioides.
 culture, fruit bodies production 8695.
Pleuratus euosmus.
 volatiles biosynthesis, odors association 133.
Pleuratus floricola.
 culture 8705.
Pleuratus oestratus.
 culture 8705.
 culture, fruit bodies production 8697.
 fatty acid composition, lipid composition 5336.
 growth, lanthanum T20 effects on 8259.
 penicillin acylase biosynthesis, citric acid effects on 2582.
 protocatechuate dioxygenase, purification, biodegradation, protocatechuic acid 7754.
Pleuratus pulmonarius.
 culture, fruit bodies production 8697.
Pleuratus sajor-ajju.
 cellulolytic enzymes production 90.
 culture, *Oryza sativa*, lignocelluloses biodegradation, residues, use methanogenesis 2697.
Plodia interpunctella.
 biological control, *Bacillus thuringiensis* 4386.
Pneumonia.
 Mycoplasma hyopneumoniae, pigs, enzyme-linked immunosorbent assay, diagnosis 5894.
Poa annua.
 Claviceps purpurea infection, conidia overwintering 7175.
 Puccinia brachypodii rust, India 2036.
Poa annua var. reptans.
 anthracnose, *Colletotrichum graminicola*, epidemiology, weather 5429.
Poa pratensis.
 blight, Fusarium, association, *Leptosphaeria korrae*, *Phialophora graminicola* 5418.
 leafspot, Drechslera sorokiniana, herbicides soil applications effects on 3803.
 leafspot, ethylene induction leaves chlorosis 8797.
 white rot, detritus effects on pathogenesis, fungi 8785.
Pod rot.
 phytopathogenic fungi, *Arachis hypogaea*, calcium levels effects on pathogenesis 1121.
 Theobroma cacao, disease control, metalaxyl, cuprous oxide, Phytophthora palmivora 5526.
Podopisals.
 ectomycorrhizas symbiosis, Australia 2132.
Podospheia leucotricha.
 powdery mildew, *Malus*, disease control, fungicides 5516.
 powdery mildew, *Malus domestica* dormancy, temperature effects on 7965.

Podosphaera oxycanthae,powdery mildew, *Prunus*, disease control, fungicides, new records 339.**Poecolepis**,

(actinomycetozoa symbiosis, Australia 2132.

Poly(A),

antiviral activity, Rauscher leukemia virus 4760.

translation, ribosomal protein S1 repeated sequence role, *Escherichia coli* 4258.**Poly(U)**,ribosomal protein S1 repeated sequence role, *Escherichia coli* 4258.**Poly(4-vinyl-N-ethylpyridinium bromide)**,immobilization α -chymotrypsin, penicillin amidase, matrix conformation effects on activity 1769.**Poly(acrylonitrile)**,immobilization α -amylase, *Bacillus subtilis* 1772.**Poland**,soil, *Azospirillum* isolation 4665.**Polar environments**,

decay fungi, wood 3920.

Poly(t-C),

use, bovine diarrhea-mucosal disease virus assays 5890.

Pollinosis,

adsorption, soil, sewage effluents, ions effects on 4934.

antibodies titration, sensitivity, HEP-2 cells, Vero cells 5003.

capsid protein, antigenic determinants, vaccines production 6614.

contamination, drinking water, samples, transport, processing, methodology 7560.

detection, immunoelectron microscopy, supports, effects on 5881.

5-oxo-L-proline, 2-deoxy-D-glucose, effects on, replication 9127.

interferon, heat-hydrogen peroxide, septic tanks effluents 9243.

interferon antiviral activity 2233.

propagation, cell culture, methodology 2433.

ultrafiltration isolation, water reclamation 2396.

water pollution, rivers, Japan 8423.

water quality, rivers, sewage effluents 9254.

Pollivirus 1,

adsorption kinetics, clays 379.

capsid protein expression, cloning vectors, *Escherichia coli*, vaccines production 6605.

disinfection, chlorine, synergism, chlorine dioxide, ozone, peracetic acid,

sewage effluents 6894.

ferric chloride, flocculation, recovery, beef extracts 4900.

levels, measuring techniques, drinking water, waste water, lakes, marine

environment 7532.

lycaine effects on 4021.

membrane filtration, adsorption 5013.

removal, resins adsorption, drinking water 1496.

replication, cell culture, prostaglandin E1 inhibition 7385.

strains differentiation, use, monoclonal antibodies 619.

transport, survival, sewage 5828.

Pollivirus 2,

antiviral activity, plant extracts 8325.

replication, antiviral activity, cyclosporin A, cell culture 8330.

Pollivirus 3,

virulence, antigenicity, vaccines production 6624.

Pollen,formation, *Lycopodium* esculentum, ultrastructure, tobacco rattle virus

infection 8005.

germination, *Citrus limon*, fungi filtrates effects on 2800.

localization, virus-like particles, cherry leaf roll virus, transmission

(vertical), *Prunus avium*, *Betula pendula*, *Juglans regia* 7990.management, disease control, ergot, *Pennisetum americanum* 1990.

morphology, viruses infection 1108.

Pollutants,

aquatic environment, toxicity testing, bioassays, luminous bacteria 1601.

aromatic compounds, ozonation, biodegradability, wastewater treatment 2371.

biodegradation, ground water, bacteria 5814.

biodegradation, kinetics, activated sludge, industrial effluents 1486.

biodegradation, ozonation, wastewater treatment 1469.

biodegradation, ozonation, wastewater treatment 1480.

biodegradation, waste water infiltration, ground water, indigenous species,

bacteria 5813.

chlorinated hydrocarbons, detoxification, genetic engineering, microorganisms

4089.

fermentation, anaerobic conditions, soil 5670.

Polluted environments,isolation, *Listeria*, methodology 4951.**Pollution**,

association, sewage, land disposal, wastewater treatment 8400.

heavy metals, bacteria biodegradation, resistance 3680.

hydrocarbons, *Pseudomonas* biodegradation 3988.

organic compounds, biodegradation, bacteria films, ground water 8690.

Pollution control,

bacteria, freshwater pollution, industrial wastes 4696.

industrial wastes, freshwater pollution, bacteria 4696.

industrial wastes, use, genetic engineering microorganisms 4125.

pathogens, *Salmonella*, sewage sludge, digestion (anaerobic) 2368.water reclamation, indicator species, viruses, *Mycobacterium*, *Pseudomonas**aeruginosa*, *Candida albicans* 2364.**Pollution detection**,

surface water, microbial pollution, fecal coliforms, enumeration, pour-plate

method 2397.

Pollution effects,

acid rain, nitrification, denitrification, soil microorganisms 8245.

acid rain, plant diseases, pathogens 7520.

air, carbon dioxide production, soil microorganisms 3951.

fresh water, *Bacillus thuringiensis*, *Bacillus sphaericus*, toxicity, biologicalcontrol, larvae, *Culex quinquefasciatus*, *Aedes aegypti* 2658.

heavy metals, community composition, soil microorganisms 2142.

heavy metals, toxicity, soil microorganisms, pesticides 5860.

microorganisms, ecosystem analysis, measuring techniques, reviews, books 5092.

mineral acids drainage, leaf litter decomposition, reservoirs 4429.

petroleum, microorganisms, books 8497.

soil microorganisms, forest floor, sulfur dioxide 5613.

soil pollution, fluorine, soil microorganisms, biological activity 413.

waste water, water quality, canals, indicator species, fecal coliforms 4132.

water pollution, phenols biodegradation, aquatic microorganisms 5812.

Pollution indicators,indicator species, pollution monitoring, water quality, rivers, *Clostridium**perfringens* 5855.

phages, use, association, enterovirus microbial pollution, drinking water 8425.

pollution monitoring methodology, water quality, indicator species, *Salmonella*

5856.

Pollution monitoring,

biochemical oxygen demand, water analysis, methodology 6680.

fecal coliforms, lakes 2398.

fecal coliforms, self-purification, lakes 569.

indicator species, water quality, rivers, *Clostridium perfringens* 5855.

microbial pollution, bacteria, runoff, lakes, mathematical models 565.

microbial pollution, coliforms, indicator species, spatial distribution, seasonal

variations, lakes, USA 8419.

microbial pollution, indicator species, bacteria, coastal waters 2400.

rivers, fecal coliforms most probable number 1495.

water quality, methodology, indicator species, *Salmonella* 5856.**Pollution research**,

microbial pollution, wastewater treatment aerosols 3187.

Poly(methacrylic acid),immobilization α -chymotrypsin, penicillin amidase, matrix conformation

effects on activity 1769.

Poly(ribosaccharate),

Haemophilus influenzae, measuring techniques, enzyme immunoassay substrates 724.

Poly(tetrafluoroethylene),membranes, use, *Rhizopus* exo-1,4- α -D-glucosidase immobilization 39.**Poly (t-C)**,effects on tobacco mosaic virus multiplication, spreading, *Nicotiana tabacum*

cultivars 1141.

Poly- β -hydroxybutyrate,high-pressure liquid chromatography, *Rhizobium japonicum*, bacteroids,

characterization 1653.

intracellular levels, flow cytometry, fermentation monitoring, *Alcaligenes**eutrophus* 9295.**Polyacrylamide**,gels, + sodium dodecyl sulfate electrophoresis, comparison typing, *Neisseria*

meningitidis clinical isolates identification 2456.

immobilization, *Escherichia coli*, *Pseudomonas putida*, effects on morphology, DNA

biosynthesis 1614.

Polyacrylic acid,effects on tobacco mosaic virus multiplication, spreading, *Nicotiana tabacum*

cultivars 1141.

Polyamine oxidase,acetylpolymyamines oxidation, extracellular enzymes, *Penicillium* 932.**Polyamines**,biosynthesis regulation, role, histone H2B, DNA-binding protein, *Escherichia coli*

2655.

Polyanions,

antiviral activity, tobacco mosaic virus 9129.

Polyethylene glycol,

dextrans, solutions, two-phase systems, separation techniques, conidia,

sporangiospores, fungi 8499.

oxidation enzymes, bacteria 7678.

separation techniques, ligands, aflatoxin B1, radioimmunoassay 7099.

Polyethylenimine,immobilization, *Brevibacterium flavum*, fumarate hydratase activity 75.**Polygalacturonase**,activity, cell culture, *Xanthomonas malvacearum* 3516.biosynthesis, *Alternaria brassicae* var. *sarson* 8602.biosynthesis, *Aspergillus alliaceus* 6038.characterization, *Citrus sinensis*, *Diplodia natalensis* post-harvest decay 7198.

Colletotrichum gloeosporioides, inhibition, fungicides role 1224.

inhibitors, *Pisum sativum*, disease resistance, phytopathogenic fungi 7203.

isoenzymes, isolation, purification, chromatography, isoelectric focusing,

Penicillium oxalicum 7720.isolation methodology, *Aspergillus niger* 3480.physicochemical properties, *Pseudomonas solanacearum* 8611.production, *Aspergillus niger*, use pulp, *Agave fourcroydes* 5169.purification, extracellular enzymes, *Aspergillus niger* 926.*Rhizopus stolonifer*, role, *Rhizopus communis* antifungal agents induction 297.role *Sclerotinia sclerotiorum*, pathogenesis, virulence, *Helianthus annuus* 2010.**Polygenic inheritance**,disease resistance, *Pyricularia oryzae* blast, *Oryza sativa* 6297.**Polyhexamethylene biguanides**,antibacterial activity, recovery, *Escherichia coli* 9265.**Polymerization**,radiation, *Streptomyces* phaeochromogenes immobilization, glucosylphosphate

isomerase activity 6027.

Polymers,

Klebsiella aerogenes capsules, binding, heavy metals, activated sludge 6679.

medical dressings, surfaces hydrophobicity, cell adhesion, *Staphylococcus**epidermidis* 8428.substrates, +penicillin amidase, use, *Escherichia coli* immobilization 778.

supports, bacteria, immobilized cells 763.

Polymyxa betae,vectors, plant viruses, plant diseases, roots, *Beta vulgaris*, British Isles 7190.**Polymyxa**,agar diffusion test, *Mycobacterium fortuitum*, *Mycobacterium chelonae*,

differentiation 1405.

susceptibility, *Staphylococcus aureus* identification 6547.**Polymyxin B**,antibacterial activity, *Escherichia coli*, temperature dependence 9198.

antibiotic sensitivity testing, gram-negative bacteria, characterization 6548.

antibiotic sensitivity testing, *Pseudomonas aeruginosa* 3079.

cross-linkage, gramicidin, antibacterial activity 4055.

derivatives, antibacterial activity, *Escherichia coli* outer membranes, complement

bactericidal activity 5784.

+EDTA-trimethamine, antibacterial activity, gram-positive bacteria 4816.

induction lysis, phages infected *Pseudomonas aeruginosa* 4856.

N.M.R. 2279.

sensitization, *Escherichia coli*, valinomycin, antibiotic A23187, antibacterial

activity 7453.

toxicity, comparison *Bacillus thuringiensis* toxins, larvae, *Aedes aegypti* 2661.**Polymyxins**,

antibacterial activity 2278.

derivatives, binding outer membranes, stimulation susceptibility, complement,

antibiotics 4803.

Subject Index

- 230

Populus, (continued)

wood hydrolysis, cellulolytic enzymes, mathematical models 8539.

Populus balsamifera

leafspot, etiology, *Marssonina balsamiferae* sp.nov., taxonomy, Canada 3913.

Populus deltoides

disease resistance, *Melampsora medusae* infection, light, temperature effects on

360.

Marssonina brunnea infection prophylaxis relationship fungicides seed treatments

2112.

wood, storage, decay fungi, *Basidiomycetes* 8197.

Populus euramericana

disease resistance, *Melampsora medusae* infection, light, temperature effects on

360.

wetwood, population levels, *Enterobacter*, *Clostridium* 8953.

Populus nigra

× *Populus trichocarpa*, silviculture, plantations, nitrogen fixation,

actinorrhizas 8156.

Populus tremula

stands, decay, *Heterobasidion annosum*, *Cytospora chrysosperma* 356.

Populus tremuloides

pathogenicity, *Hypoxylon mammatum* toxins effects on 7233.

stem canker, *Hymphoxylon mammatum*, virulence, pathogenesis, disease resistance

8174.

wood, wood products fluore hydrolysis, sugars utilization, 2,3-butanediol

production, *Klebsiella pneumoniae* 8632.

Populus trichocarpa

× *Populus nigra*, silviculture, plantations, nitrogen fixation, actinorrhizas

8156.

Porcellio scaber

food preferences, decomposition, *Pinus*, leaves, fungi, decomposition 2912.

Portia placenta

brown rot, carbohydrates degradation enzymes 6820.

brown rot, hydrogen peroxide, free radicals, biodegradation, cellulose 6173.

Portia vaporaria

brown rot, wood decay, *Pinus* 8947.

Porinis

Rhodospseudomonas sphaeroides, characterization 5956.

Pork

food contamination, psychrotrophic bacteria 6966.

meat production, microorganisms counts 7841.

minced meat, *Clostridium botulinum* toxins inhibition, iron chelating agents,

nitric oxide, carbon monoxide 7035.

packaging, storage, light effects on bacteria growth, spoilage 4465.

spoilage, mold, freezing, *Staphylococcus aureus* survival 7859.

surines, slurries, effect on, *Clostridium botulinum*, growth 1924.

Post-harvest decay

Alternaria alternata, potatoes 2822.

brown rot, *Monilia fructicola*, fruits, biological control, *Bacillus subtilis*

8053.

Colletotrichum gloeosporioides, *Alternaria*, *Botrytis*, disease control,

immersion-*n*-captafol, blueberries 3851.

Cylindrocylindrium heptaseptatum, *Cylindrocylindrium pteridis*, prevention, benomyl,

cold storage, *Rumohra adiantiformis* 8128.

Diplodia natalensis, *Citrus sinensis*, polygalacturonase characterization 7198.

disease control, antifungal activity, sodium dodecylbenzene sulfonate, tomatoes

8054.

Erwinia, soft rot, antagonism, *Pseudomonas putida*, biological control, *Solanum*

tuberosum 8112.

fruit rot, fungi 8876.

fruit rot, oranges, callus-association, *Aspergillus aculeatus*, *Botrydiodiplodia*

theobromae 2049.

fungal flora, ergosterol levels, indicators, corn, rice 2051.

fungal flora, *Triticum aestivum* 7196.

fungi, disease control, dichloronitroaniline, *o*-phenylphenol, apples 8052.

fungi, fungal flora interaction, competition, factors affecting 8050.

Geotrichum, tomatoes, fungicides, disease control 1168.

grapes, effects on wine, fermentation 6939.

neck rot, *Botrytis alli*, harvesting, drying effects on, onions 8055.

oranges, *Penicillium italicum*, *Penicillium digitatum*, benzimidazoles resistance

2901.

oranges, stem rot, green mold, disease control, fungicides 5470.

Oryza sativa, distribution, mycelia, sterigmatocystin, *Aspergillus versicolor*

8675.

papaya, fungi, disease control, hot water 5469.

Penicillium digitatum, control, phosetyl AI treatment, fruits 2050.

Penicillium digitatum green mold, cross-resistance, guazatine, benomyl 2200.

Penicillium digitatum, oranges, sec-butylamine derivatives control 2821.

Penicillium digitatum, suppression phenylalanine ammonia-lyase activity,

grapefruits 2048.

Penicillium expansum, calcium, treatment, apples, effects on 3850.

Penicillium italicum, oranges susceptibility, ethylene treatment 3853.

Penicillium, lemons, disease control 1167.

Phoma violaceae, *Malus pumila*, pathogenicity 2053.

prevention, carbon monoxide, storage conditions, grapes 8057.

Rhizopus stolonifer, *Primus persica*, fruits, characterization 8878.

seed treatments, benomyl, labendazole, *Zea mays* 2094.

Sclerotium hyposcopiae, papayas, pathogenesis 1164.

tobacco, *Meloidogyne arenaria* incidence, USA, South Carolina 3852.

Postoperative infection

bacteria, plastics prophylaxis, man 4958.

heart surgery, gram-negative bacteria isolation, antibiotic sensitivity testing,

aminoglycoside antibiotics 3107.

hysterectomy, clinical isolates, antibiotic sensitivity testing, man 9177.

role airborne bacteria, communication, operating theaters, man 4960.

Potassium

concentration, association, ethanol, production, *Saccharomyces cerevisiae* 3613.

Lyopercosium esculentum predisposing factors, *Verticillium dahliae* wilt 3833.

nutrient requirements, ethanol utilization, single-cell protein production,

Torulispora ethanolicola 3409.

transport, fusicoic acid effects on, roots, *Beta vulgaris* 8741.

Potassium hydroxide

isolation methodology, *Yersinia*, feces 696.

suspensions, comparison, vancomycin disc-diffusion test, identification, aerobic

bacteria, rods 3262.

treatment, feces, effects on *Yersinia enterocolitica* isolation 3265.

Potassium iodide

antifungal activity, *Conidiobolus*, *Basidiobolus* 7380.

Potassium metabisulfite

aureofungin, *Botrydiodiplodia theobromae*, fruit rot, *Citrus reticulata* 5525.

Potassium sorbate

+chlorotetracycline, fishery products preservation, vacuum packaging 7885.

effects on spoilage, yeasts, confectionery 8698.

ham, food contamination, bacteria, yeasts, effects on food spoilage 3730.

inhibition *Clostridium botulinum* growth, packaging, films, oxygen permeability,

luncheon meat 7023.

+sodium nitrite, inhibition *Clostridium botulinum* growth, toxins production,

frankfurters 7021.

Potassium tartrate

+glycerol, density gradients, separation techniques, viruses, feces, man 1555.

Potassium thiocyanate

staining, removal, use, immunofluorescence, measles virus infected cells 1538.

Potassium 13-vanado manganate

antiviral activity, tobacco mosaic virus 9129.

Potassium 13-vanado nickelate

antiviral activity, tobacco mosaic virus 9129.

Potato common scab

Streptomyces, *Solanum tuberosum* 6283.

Potato leaf roll virus

antigenic relationship, tomato yellow top virus, beet western yellows virus,

infection, *Lyopercosium esculentum*, *Solanum tuberosum* 8847.

detection, enzyme-linked immunosorbent assay, *Solanum tuberosum* 5883.

detection, *Solanum tuberosum*, use, enzyme-linked immunosorbent assay 8832.

disease resistance, *Solanum*, plant breeding 2837.

disease transmission, *Myzus persicae* vectors, pathogenicity, host range 4553.

disease transmission, role, *Myzus persicae*, *Aphis gossypii*, *Solanum tuberosum*

8023.

infection, *Solanum tuberosum*, insecticides, disease control, *Myzus persicae* 2065.

infection, *Solanum tuberosum*, metribuzin foliar applications effects on yield

association 8019.

infection, tubers, *Solanum tuberosum* 8031

Potato spindle tuber viroid

detection, hybridization, electrophoresis, *Solanum tuberosum* 8861.

identification, DNA hybridization analysis methodology 8451.

infection, *Lyopercosium esculentum*, purification, pathogenesis relationship

proteins 8853.

infection, *Lyopercosium esculentum* leaves, site location, nuclei 3819.

infection, pathogenesis, *Solanum* 8849.

Potato virus A

detection, *Solanum tuberosum*, use, enzyme-linked immunosorbent assay 8832.

disease resistance, *Solanum*, plant breeding 2837.

enzyme-linked immunosorbent assay detection, tubers, *Solanum tuberosum* 4538.

maintenance, symptoms, distribution, *Solanum tuberosum* seedlings 8865.

Potato virus M

disease resistance, *Solanum gossypii*, inheritance 6294.

maintenance, symptoms, distribution, *Solanum tuberosum* seedlings 8865.

Solanum tuberosum, detection, use, enzyme-linked immunosorbent assay 8832.

Potato virus S

infected *Solanum tuberosum*, benomyl effects on shoots tissue culture 8001.

maintenance, symptoms, distribution, *Solanum tuberosum* seedlings 8865.

Solanum tuberosum, detection, use, enzyme-linked immunosorbent assay 8832.

transmission, cutting instruments, *Solanum tuberosum*, greenhouses, crop fields

8023.

infection, *Solanum tuberosum*, metribuzin foliar applications effects on yield

association 8019.

infection, tubers, *Solanum tuberosum* 8031.

maintenance, symptoms, distribution, *Solanum tuberosum* seedlings 8865.

Solanum tuberosum, detection, use, enzyme-linked immunosorbent assay 8832.

+tobacco mosaic virus mixed infection, *Datura stramonium* leaves lesions 288.

Potato virus Y

antiviral activity, ribavirin, petioles tissue culture, *Nicotiana tabacum* 3904.

detection, enzyme-linked immunosorbent assay, *Solanum tuberosum* 5883.

disease resistance, cultivars, *Capsicum annuum* 8070.

disease resistance, plant breeding, cultivars, *Capsicum annuum* 8909.

disease resistance, *Solanum*, plant breeding 2837.

disease transmission, heredity, *Myzus persicae*, *Aphis gossypii*, *Datura metel*

3927.

disease transmission, role, *Myzus persicae*, *Aphis gossypii*, *Solanum tuberosum*

8023.

enzyme-linked immunosorbent assay detection, tubers, *Solanum tuberosum* 4538.

histopathology, *Solanum nigrum* var. *judaicum*, *Solanum nigrum* var. *nigrum*, *Datura*

metel, characterization 8864.

infection, *Solanum tuberosum*, metribuzin foliar applications effects on yield

association 8019.

infection, susceptibility, *Agrobacterium rhizogenes* transformation *Nicotiana*

tabacum roots tissue culture effects on 8076.

maintenance, symptoms, distribution, *Solanum tuberosum* seedlings 8865.

monoclonal antibodies characterization, use, viruses detection 2432.

plant diseases, disease transmission, *Myzus persicae*, β -farnesene derivatives

effects on 5401.

plant diseases, *Solanum nigrum* var. *judaicum*, pathogenesis 6263.

Solanum tuberosum, detection, use, enzyme-linked immunosorbent assay 8832.

susceptibility, lesions, leaves, *Solanum tuberosum* 8836.

Potatoes

endo-, 5- α -L-arabinase induction tissue disintegration, *Bacillus subtilis*

1761.

food processing waste water, use, fermentation, *Saccharomycopsis fibuligera*,

Candida utilis, biomass 157.

Potatoes, (continued)

Fusarium solani var.coeruleum, Fusarium sambucinum, biosynthesis, vomitoxin, acetyldeoxyvinifenol, trichothecenes 5372.
post-harvest decay, Alternaria alternata 2822.
wastewater treatment, digestion (anaerobic) 7520.

Potentiometry,

lipic acid reduction, faecal coliforms, indicator species, water analysis, microbial pollution 2392.

Potexvirus,

plant viruses, host range, infectivity, characterization 234.

Potyvirus,

inclusion bodies, leaves, tissues, variability 8825.

Poultry,

Campylobacter, disease spread, kitchens 8429.
Campylobacter fetus subsp.jejuni isolation, enumeration, media (enrichment) 2462.
carcasses, contamination, coliforms, meat industry 1051.
contamination, Salmonella growth, glucose oxidase control 7843.
cured products, spoilage, preservatives, sodium nitrite, sodium ascorbate 7886.
food contamination, Campylobacter fetus subsp.jejuni 1058.
food contamination, chlorine dioxide antibacterial activity, food processing, off flavor, bacteria 7020.
food processing, meat industry, hygiene, bacteria contamination 3707.
food processing, meat industry, Staphylococcus aureus contamination, biotyping 6179.
growth conditions, Salmonella, incidence, food processing 6983.
meat products, bacteria contamination 1049.
meat products, spoilage, psychrotrophic bacteria, temperature, shelf life 6972.
meat reprocessing, bacteria contamination 2738.
microwave oven cooking, inactivation, Salmonella typhimurium, Staphylococcus aureus 1048.
processing, Salmonella incidence, Australia 6194.
Salmonella typhimurium, Salmonella albany, enzyme-linked immunosorbent assay 8759.
spoilage, Staphylococcus aureus, Salmonella hadar, Salmonella typhimurium, freeze-thawing storage effects on 8975.
stuffing, cooking temperature, bacteria inactivation 5349.

Povidone-iodine,

bactericidal activity 452.
Povidone-iodine, antibacterial activity, surfactants effects on 9261.
bactericidal activity 7548.

Powder,

skim-milk, Bacillus cereus contamination 7000.

Powdery mildew,

Acroporium, Ipomoea fistulosa, new records, India 2038.
Begonia socotrana, etiology 5464.
colonies enumeration, Hordeum vulgare 1129.
disease control, antibiotics + copper sulfate, Cucumis sativus 8139.
disease control fungicides, effects on soil microorganisms, plants 2078.
disease control, tridemorph, fertilizer applications, yield, Hordeum vulgare 2900.
disease control, use, fungicides, Turkey 337.
disease resistance, Erysiphe graminis, Hordeum vulgare 5498.
disease resistance, plant breeding, Hordeum 2839.
disease resistance, role necrosis mutation, Hordeum vulgare 3854.
disease resistance, Sphaerotheca pannosa var.persicae, genetic analysis, Persica 4570.
disease resistance, sporulation, measuring techniques, selection, plant breeding, Secale cereale 2827.
Erysiphe, epidemiology, spectrophotometry 7917.
Erysiphe, biological control, hyperparasitism, Dissoconium aciculare 8911.
Erysiphe chiochacearum, host-pathogen interactions, disease resistance, inheritance, plant breeding, Curcubita moschata 3862.
Erysiphe chiochacearum, inhibition, Nicotiana glutinosa diterpenes, foliar applications, Nicotiana glabrum 2076.
Erysiphe chiochacearum, Lactuca sativa 1159.
Erysiphe chiochacearum, Sphaerotheca fuliginea, Czechoslovakia, Cucumis sativa 3836.

Erysiphe graminis, disease resistance, genetic variance, plant breeding, Hordeum vulgare 316.
Erysiphe graminis, Hordeum vulgare, disease control, use, antitranspirants 291.
Erysiphe graminis, incidence, cultivars mixed culture, Hordeum vulgare 2841.
Erysiphe graminis, incidence, effects on, yield, Triticum aestivum, Bulgaria 7959.
Erysiphe graminis, pathogenicity genes, host-pathogen interactions, disease resistance genes, Hordeum vulgare 2861.
Erysiphe graminis f.sp.avenae, disease resistance breeding, Avena sativa 307.
Erysiphe graminis f.sp.hordei, avirulent strains, inoculation, disease control, Hordeum vulgare 2066.
Erysiphe graminis f.sp.hordei, disease resistance, correlation enzyme polymorphism, plant breeding, Hordeum spontaneum 7209.
Erysiphe graminis f.sp.hordei, disease resistance, plant breeding, Denmark, Hordeum vulgare 2880.
Erysiphe graminis f.sp.hordei, disease resistance, plant breeding, germplasm, Hordeum spontaneum 5496.
Erysiphe graminis f.sp.hordei, factors affecting conidia production, Hordeum vulgare 7957.
Erysiphe graminis f.sp.hordei, genotypes, virulence, host-pathogen interactions, Hordeum vulgare 8781.
Erysiphe graminis f.sp.hordei, germ tubes, appressoria, penetration, host-pathogen interactions, Hordeum vulgare 8788.
Erysiphe graminis f.sp.hordei, inhibition ribulosebiphosphate carboxylase, carbon fixation enzymes, activity, Hordeum vulgare 5434.
Erysiphe graminis f.sp.tritici, disease resistance, plant breeding, Triticum aestivum 8967.
Erysiphe graminis f.sp.tritici, disease resistance, Triticum dicoccoides 5415.
Erysiphe pisi, pathology, Lens culinaris, insecticides, acaricides, antifungal activity 8917.
Erysiphe polygoni, Pisum sativum disease resistance 1978.
fungi, effects on yield, disease resistance, genotypes, Triticum aestivum 8098.
Hordeum, Erysiphe graminis, disease resistance 5501.
Hordeum vulgare, disease resistance, genetic analysis, plant breeding association 8081.
Hordeum vulgare, Erysiphe graminis f.sp.hordei, factors affecting epidemiology 5422.
incompatibility, Hordeum vulgare, carbon dioxide exchange 1130.

Powdery mildew, (continued)

Leveillula taurica, incidence, Lycopersicon esculentum, Cyamopsis tetragonoloba, Nicotiana trigonophylla, Caesalpinia gilliesii, USA, Arizona 8035.
Microsphaera penicillata, effects on photosynthesis, Carya illinoensis 5446.
Podosphaera leucotricha, Malus, disease control, fungicides 5516.
Podosphaera leucotricha, Malus domestica dormancy, temperature effects on 7985.
Prunus, Podosphaera oxycanthae, Sphaerotheca pannosa, disease control, fungicides, new records 339.
Sphaerotheca pannosa, disease resistance, plant breeding, Rosa multiflora 8904.
Triticum aestivum, disease resistance, genetic control 8101.
Triticum aestivum, disease resistance plant breeding correlation triadimefon disease control, Erysiphe graminis 5502.
virulence, host-pathogen interactions, disease resistance, plant breeding, varieties, Hordeum vulgare 2862.
Vitis, Uncinula neator, association, yield, growth, wine quality, USA, New York 8833.
Vitis vinifera, sulfur applications, disease control 340.

Poxvirus, recombinants, genetic engineering, vaccines production 6633.

Pozizella ercae, mycorrhizas, inhibition meristems development, roots, Calluna vulgaris 5560.

Precipitation, plasmids, DNA, purification, chromatography, methodology 5917.
proteins, purification, methodology, bioreactors 3426.

Precipitin test, agar, infectious bursitis virus 8453.
gel diffusion, diagnosis, parvovirus (porcine) infection, pigs 5879.

Predation, nematophagous fungi, Nemata population dynamics, activated sludge 7537.

Predator-prey interactions, Arthropobrys oligospora, Nematoda, transmission electron microscopy 2125.
Bacillus thuringiensis larvae, biological control effects on, Bacillus thuringiensis 8643.
biological control, pathogens, Bacillus sphaericus, Bacillus thuringiensis, Toxothrymchites, Culicidae 1841.
host-pathogen interactions, host-parasite interactions, Spodoptera littoralis, Bacillus thuringiensis, Zele chlorophthalmia, Paederus affleri, Egypt, Arab Rep. 128.
nematophagous fungi, Rhabditis, Aphelenchus, Mexico 2126.

Pregnancy, man, Streptococcus group B identification methodology, genitourinary tract infection 2451.
pigs, feeds contamination effects on fetuses, vomitoxin 2746.
rubella virus immunoglobulin M detection methodology, man 5878.

Prephenate dehydratase, activity, tryptophan activation, Candida maltosa 8580.

Prephenate dehydrogenase, activity, tryptophan activation, Candida maltosa 8580.

Preservation, ammonia, fermentation, silage, com 2744.
bacteria culture, methodology 4188.
cell culture, Mucor, Rhizopus, Aspergillus 5087.
com, ammonia + propionic acid, spoilage, bacteria, fungi 7025.
dairy starters, lactic acid bacteria, freeze drying 1612.
fishery products, chlorotetracycline, +potassium sorbate, +tetrasodium ethylenediaminetetraacetate, vacuum packaging 7885.
food, ionizing radiation, reviews 8714.
forest products, biodegradation 1250.
forest products, biodegradation, fungi, Switzerland 1249.
fungi, methodology, culture collections 2526.
hygiene, cosmetics 7397.
media, Campylobacter jejuni 5043.
smoke, seafood, Scrimidae 8718.
Streptomyces air spora, liquid culture methodology 3292.

Preservatives, antimicrobial activity, pharmaceuticals 1366.
antimicrobial agents contamination, antimicrobial activity 9137.
antimicrobial agents, effects on Aspergillus flavus aflatoxin B1 biosynthesis, in vitro 7095.
bactericidal activity, urine culture, tubes, samples volume 708.
cosmetics 1367.
effects on, bacteria, fungi, biodegradation, forest products, colonization, succession 1241.
effects on fungi spores, germination, growth, thermal injury 1072.
Escherichia coli, Pseudomonas aeruginosa, wild type, envelopes mutants, sensitivity association, cell membranes role 3080.
feeds, N-xime ethers, antifungal activity 8713.
food 1073.
food, lysozyme characterization, Streptomyces rutgersensis 6006.
liquids, comparison, freeze drying, effects on microorganisms growth, urine culture 3268.
media (transport), urine, bacteriuria diagnosis 1608.
pentachlorophenol, inhibition decay fungi, wood, buildings 7242.
pharmaceuticals, microorganisms contamination, reviews 8148.
polyvinyl acetate, fungi biodegradation, buildings materials 6304.
propionic acid, effects on fungi feeds, pelleting, feeds, com 7884.
silage, Saccharomyces cerevisiae single-cell protein, nutritive value, cattle, sheep 2477.
sodium citrate, antibacterial activity, heat resistance, spore germination, Bacillus stearothermophilus, canned food 7376.
sodium nitrite, sodium ascorbate, prevention, spoilage, cured products, ham 7886.
tributyltin chloride, aminophenylmercury acetate, prevention, biodegradation, cellulose, soil microorganisms 7302.
wood, copper-chrome-arsenic, chemical analysis, iodometry 7244.
wood, diffusion, toxicity, fungi 1251.
wood, pentachlorophenol, industrial effluents, wastewater treatment 556.
wood, tolerance, decay fungi 2108.
wood, wood, paints, paper, electronic equipment 1291.
xylene, sorbitol, Bacillus thuringiensis formulations, biological control, Christoneura tumifera 2667.

Pressure,

carbon dioxide, effects on Streptomyces tetracycline biosynthesis, fermenters 2281.
hydrostatic, disinfection, inactivation, Escherichia coli 5866.
use extraction, disintegration, microorganisms 4972.

- Primaquine**, conversion, *Candida tropicalis* 3548.
- Primary production**, mycorrhizas, population levels, soil, forests 5553.
- Primates**, viruses infection, detection, methodology 9274.
- Primordia**, formation, *Coprinus congregatus*, cell culture methodology, protein biosynthesis, nucleic acids biosynthesis, inhibition 2527.
- Pristane**, oxidation, *Rhodococcus erythropolis* 4685.
- Probenecid**, antibacterial activity, *Neisseria gonorrhoeae*, interaction, benzylpenicillin 6459.
- Probes**, enterotoxins genes, *Escherichia coli* detection, water, DNA hybridization analysis 1087.
- genes, *Campylobacter* *Vibrio cholerae* like toxins, *Escherichia coli* enterotoxins 5369.
- Procambarus clarkii**, food processing wastes, astaxanthin extraction, silage 2714.
- Prochloraz**, resistance, *Penicillium italicum*, *Penicillium digitatum*, post-harvest decay, benzimidazoles 2901.
- Procyonidae**, antifungal activity, resistance, *Aspergillus nidulans*, *Cladosporium cucumerinum*, *Penicillium italicum* 8296.
- Prodigiosin**, *Serratia marcescens*, biosynthesis, polymyxin B effects on 1404.
- Progesterone**, hydroxylation, immobilized cells, *Aspergillus ochraceus* spores 6048.
- Mycobacterium aurum*, biosynthesis, steroids biodegradation 946.
- Prohormone**, purification, characterization, *Cephalosporium* 8523.
- Prolins**, hydroxylation, reaction solutions, pH, temperature, *Streptomyces griseoviridis* 5109.
- production, *Escherichia coli* 3408.
- Prolyl endopeptidase**, substrate specificity, *Flavobacterium meningosepticum* 16.
- Promoters**, lac promoter, genetic control, interferon production, *Escherichia coli* 3424.
- Saccharomyces cerevisiae*, xylose isomerase gene expression, *Escherichia coli* 5157.
- tylactate promoter, genetic control, interferon production, *Escherichia coli* 3424.
- Prostaglandins**, *Salix alba*, disease transmission, Watermark disease, *Erwinia salicis* 363.
- soil microorganisms, size, relationship, population levels, longevity 397.
- Vericillium dahliae*, distribution, soil, USA, Ohio 7918.
- vesicular-arbuscular mycorrhizas, isolation methodology, measuring techniques, soil, reviews 824.
- Propamocarb**, cross-resistance, metalaxyl, *Phytophthora infestans*, *Pseudoperonospora cubensis*, disease control, *Solanum tuberosum*, *Cucumis sativus* 2894.
- disease control, *Pythium aphanidermatum*, blight, *Agrostis* 8134.
- disease control, *Pythium*, dieback, *Daucus carota* 8116.
- Propane**, metabolism, biodegradation, oxygenase activity, *Nocardia paraffinicum* 8275.
- Propanoic acid**, biosynthesis, *Micromonospora chalybeata*, structure, characterization, antifungal activity, *Valeria ceratoperma* 3149.
- Propargylglycine**, containing dipeptides, peptide synthesis, antibacterial activity 4736.
- Prophages**, dairy starters, DNA homology, phages lysis, *Streptococcus cremoris* 5335.
- Propham**, herbicides, nitrification, soil 9026.
- β -Propiolactone**, inactivation, *Salmonella typhimurium*, vaccines, immunogenicity, mice 2324.
- Propionibacterium**, cyanocobalamin, biosynthesis, amino acids, betaine, choline, effects on 146.
- cyanocobalamin, production, fermentation, whey 145.
- dairy starters, cold temperature-sensitive mutant, mutagenesis, N-nitroso-N-methyl-N'-nitroguanidine B729.
- Propionibacterium acidipropionis**, dairy starters, fatty acid composition, relationship growth, cold 3699.
- Propionibacterium acnes**, extracellular enzymes inhibition, antibacterial activity, propylene phenoxetol 4725.
- phospholipase C, purification, characterization 8563.
- semisynthetic media (culture), production, polysaccharides, methodology 110.
- Propionibacterium freudenreichii subsp. shermanii**, cyanocobalamin production, growth conditions, optimization 2669.
- Propionibacterium freudenreichii subsp. shermanii**, dairy starters, fatty acid composition, relationship growth, cold 3699.
- Propionibacterium jensenii**, dairy starters, fatty acid composition, relationship growth, cold 3699.
- Propionibacterium shermanii**, cyanocobalamin, biosynthesis, amino acids, betaine, choline, effects on 146.
- cyanocobalamin, production, fermentation, whey 145.
- polyphosphate kinase, purification, characterization 7698.
- Propionic acid**, ammonia, preservation, spoilage, bacteria, fungi, corn 7025.
- antimicrobial activity, microorganisms, effects on, hay, preservation 6490.
- biodegradation, mixed culture fermenters, methanogenesis 6398.
- effects on *Aspergillus flavus* aflatoxin B1 biosynthesis, in vitro 7095.
- effects on *Aspergillus parasiticus*, spores injuries, growth, aflatoxins biosynthesis 7042.
- effects on molds food contamination, corn, toxins production 2749.
- preservatives, effects on fungi contamination, pelleting, feeds, corn 7884.
- Propolis**, bactericidal activity, bacteriostasis, *Staphylococcus aureus* 9093.
- Propyl alcohol**, biodegradation, metabolism, activated sludge 6706.
- n-Propyl gallate**, stabilization, amphotericin B, antifungal activity, *Candida albicans* 1406.
- Propylene oxide**, production, immobilized cells, *Nocardia corallina* 418.
- sterilization solutions, *Bacillus subtilis* var. niger spores 4784.
- Propylene phenoxetol**, antibacterial activity, inhibition, extracellular enzymes, *Propionibacterium acnes* 4725.
- Prostaglandin A1**, antiviral activity, vaccinia virus infected L cells, gene expression inhibition 5749.
- Prostaglandin E1**, inhibition, replication, poliovirus 1, encephalomyocarditis virus, cell culture 7385.
- Prosthecochloris aestuarii**, bacteriochlorophyll c structure, high-performance liquid chromatography methodology 9315.
- Prosthetics**, blood vessels, penicillin binding, storage effects on antibacterial activity 2418.
- Protein A**, agglutination, detection antibodies, antigens, *Yersinia pseudotuberculosis* subsp. pestis 5029.
- agglutination, detection antigens, arbovirus 4991.
- biosynthesis, *Staphylococcus aureus*, clinical isolates, relationship, antibiotic resistance 9054.
- immunoassays, serotyping, herpes simplex virus clinical isolates 595.
- infection diagnosis, membrane filtration, herpes simplex virus, varicella-zoster virus 5889.
- Staphylococcus aureus*, radioactive labelling, use, radioimmunoassay association *Bacillus anthracis* 8460.
- Staphylococcus aureus*, radioimmunoassay, enkephalin 1606.
- tests, influenza antibodies determination, man 3253.
- Protein biosynthesis**, antifungal activity, metalaxyl, *Phytophthora parasitica* var. *nicotianae* 8135.
- association, betaine, stimulation, *Pseudomonas denitrificans*, cyanocobalamin, production 4401.
- Bacteroides thetaiotaomicron*, inhibition, galactosamine role 1820.
- bioreactors, immobilized cells, *Escherichia coli* 2.
- Escherichia coli*, habekacin inhibition 521.
- herpes simplex virus 1, antiviral activity, 5-(2-bromovinyl)-2'-deoxyuridine 5743.
- inhibition, antibiotics antibacterial activity 9174.
- inhibition, primordia formation, *Coprinus congregatus*, cell culture methodology 2527.
- Neurospora crassa*, conidia germination 3478.
- ribosomes role, gene regulation, antibiotic resistance ermC gene, ermD gene, *Staphylococcus aureus*, *Bacillus licheniformis* 6427.
- vesicular stomatitis virus infected cells, α -interferon effects on 6470.
- Protein composition**, hepatitis surface antigen vaccines, preparation relationship 4070.
- seeds, Glycine max, *Bradyrhizobium japonicum* strains inoculum, nitrogen fixation, nodulation 8247.
- Simulium c-natum, biological control, *Coelomycidium simulii*, *Pleistophora simulii* 2646.
- single-cell protein, thermophilic fungi 860.
- Protein kinase**, cyclic AMP dependent, phosphorylation yeasts phosphorylase, comparison phosphorylase kinase 896.
- isozymes, purification, characterization, *Saccharomyces cerevisiae* 3456.
- isolation, *Streptococcus faecalis*, characterization 8558.
- purification, characterization, *Dicystostelium discoideum* 3455.
- purification, characterization, *Dicystostelium discoideum* 7723.
- Protein M**, influenza virus, use, enzyme-linked immunosorbent assay, detection, antibodies 1541.
- Protein structure**, phase T4, thioredoxin, *Escherichia coli*, phase T4, homology, glutaredoxin 7666.
- Proteinase**, activity, gramicidin D effects on, *Bacillus thuringiensis* 1412.
- activity, gramicidin D effects on, *Bacillus thuringiensis* 6025.
- activity, spectroscopy methodology, bacteria 4213.
- albumin hydrolysis, *Aspergillus awamori* 6016.
- alkalophilic bacteria 8613.
- amylase activity, *Mucor*, *Endothia parasitica* 8599.
- Aspergillus flavus*, activity, association, hydrocarbons carbon sources comparison 2189.
- Bacillus subtilis*, immobilization, activity, cellulose supports 5999.
- Bacillus thuringiensis*, extracellular enzymes, biosynthesis, proteins effects on 1819.
- biosynthesis, amino acids effects on, *Bacillus thuringiensis* 918.
- biosynthesis, amino acids effects on, *Bacillus thuringiensis* 6029.
- biosynthesis ratio, novobiocin, *Streptomyces spheroides* 6573.
- biosynthesis, temperature effects on, *Bacillus licheniformis* 5974.
- Candida*, secretion 2593.
- Cladosporium cucumerinum*, role, pathogenesis, scab, *Cucumis sativus* seedlings 7178.
- deficiency, dairy starters, *Streptococcus lactis*, *Streptococcus cremoris*, temperature tolerance, lactic acid production 2732.
- deficiency, *Streptococcus cremoris* dairy starters, use Cheddar cheese production 2731.
- Dicystostelium discoideum*, purification, characterization 2595.
- extracellular, biosynthesis, U.V. radiation induction *Streptomyces spheroides* mutants, fibrinolysis role 8583.
- extracellular enzymes, *Bacillus megaterium*, temperature effects on 4292.
- extracellular enzymes, biosynthesis, temperature effects on, *Bacillus licheniformis* 4879.
- extracellular enzymes, characterization, *Neurospora crassa* 6885.
- extracellular enzymes, cold storage effects on recovery, *Aeromonas hydrophila* 7762.
- extracellular enzymes, isolation, characterization, *Staphylococcus aureus* 8608.
- extracellular enzymes, production, ultrastructure, *Streptomyces rimosus*, *Streptomyces violaceinereus* 6882.
- extracellular enzymes, propylene phenoxetol inhibition, *Propionibacterium acnes* 4725.
- extracellular enzymes, *Pseudomonas aeruginosa*, stimulation, whey, casein 1810.

Proteinase, (continued)

extracellular, purification, characterization, *Pseudomonas aeruginosa* 1812.
 fungi, stimulation, ripening, cheese flavor, cheese 7860.
 hydrolysis, casein, elastin, *Bacillus subtilis* 921.
 immobilized enzymes, albumin hydrolysis, *Aspergillus awamori* 4341.
 immobilized enzymes, proteins hydrolysis, bioreactors, crop residues, *Penicillium dupontii* 3475.
 industries, reviews, microorganisms 2602.
 inhibitors, disease resistance, plants 8900.
 inhibitors, low molecular weight, membranes binding, microorganisms, reviews 5164.
 inhibitors, production, screening methodology, microorganisms 7657.
 inhibitors, proinsulin, purification, characterization, *Cephalosporium* 8523.
 isolation, fermentation, *Rhizopus rhizopodiformis* 4299.
 measuring technique, feeds proteins levels, *Streptomyces griseus* 6047.
 peptide synthesis, *Streptomyces cellulosa* 7688.
 production, immunoglobulin A, methodology, pathogenicity, clinical isolates, bacteria 1575.
 production, mutagenesis, *Bacillus subtilis* 6828.
 production, nutrient availability, carbon sources, nitrogen, phosphate, *Pseudomonas fluorescens* 7749.
 production, psychrotrophic bacteria, milk contamination, nitrogen effects on 7849.
Pseudomonas, electrophoretic mobility, isolation wool, sheep 1753.
Pseudomonas fluorescens, peptides hydrolysis 1809.
 purification, affinity chromatography, *Bacillus mesentericus* 7732.
 purification, *Bacillus mesentericus* 4337.
 purification, characterization, *Monascus* 8593.
 purification, proteolysis, *Streptomyces cellulosa* 7691.
Saccharomyces cerevisiae, purification, fluorometry, assays, substrate specificity 935.
Serratia marcescens, purification, characterization 8519.
Serratia marcescens, purification, characterization, clinical isolates 1779.
 soy sauce production, role, *Aspergillus oryzae* 3697.
Streptococcus cremoris, plasma membranes localization, role peptides transport, proteolysis, milk 1747.
 substrate specificity, use amino acid sequence determination, *Lysobacter enzymogenes* 939.
 thermal stability, *Bacteroides nulosus*, characterization 7757.
Thermococcus aurantiacus, biosynthesis, activity 2579.
Proteinase Inhibitor
 serine proteinase, complex, X-ray crystallography, *Streptomyces griseus* 20.
Proteins
 analysis, plants, hypersensitive response, tobacco mosaic virus infection 7916.
 antibacterial activity, apicalin 4840.
 antigenic determinants, reviews serotypes, vaccines production 6613.
Bacillus thuringiensis subsp. *israelensis*, toxicity association *Culicidae*, isolation, characterization 1733.
 bacteria, separation techniques, downstream processing 1600.
 binding, methanol extracts, effects on inhibition, *Abies balsamea* soil nitrification, sub-alpine environments 2909.
 cellulase, production, growth conditions, effects on, *Aspergillus fumigatus* 6015.
 characterization, purification, respiratory syncytial virus 4269.
 concentration, *Vigna radiata*, plant viruses infection 2776.
 contents, *Penicillium urticae* immobilized cells, methodology 5931.
 crystals, *Bacillus thuringiensis* subsp. *israelensis*, solubilization methodology, toxicity, *Aedes aegypti* larvae 1859.
 cytoplasmic membranes, characterization, purification, *Bacillus subtilis*, sporulation 2555.
 distribution, flow cytometry, growth, monitoring, fermentation, mathematical models, *Saccharomyces cerevisiae* 6126.
 effects on *Bacillus thuringiensis* proteinase, extracellular enzymes, biosynthesis 1818.
 enzymes, separation, filtration, reviews, microorganisms 8586.
Escherichia coli, concentration, purification, absorption, silica, methodology 7668.
 excretion, glycine stimulation, *Bacillus mesentericus* 1725.
 extraction, bacteria cell disruption methodology 1593.
 feeds, levels, measuring technique, *Streptomyces griseus* proteinase 6047.
 feeds, production, association, corn: whey fermentation 982.
 fermentation, enzymatic activity measurements, solid wastes 545.
 fraction characterization, *Cucumis sativa* cotyledons, tobacco necrosis virus infection 1143.
 heat shock, biosynthesis, relationship ethanol tolerance, *Saccharomyces cerevisiae* 986.
 hepatitis B virus, micelles, isolation, immunogenicity, vaccines, Pan troglodytes 6642.
 hydrolysis, proteinase, immobilized enzymes, mathematical models, bioreactors, crop residues, *Penicillium dupontii* 3475.
 hypersensitive response, leaves, tobacco mosaic virus infection, *Nicotiana tabacum* 7199.
 influenza virus envelopes, isolation, immunogenicity, vaccines production, mice 6620.
 isolation, disintegration methodology, yeasts, bacteria 4303.
 isolation, influenza virus, immunogenicity 1704.
 levels, lignocelluloses, Lowry assay, *Clostridium thermocellum* 4424.
 lipid A complex, endotoxins, characterization, purification, *Yersinia pseudotuberculosis* subsp. *pseudotuberculosis* 3763.
 measuring techniques, fluorometry, yeasts, bacteria, biotechnology 7556.
 Medicago sativa juices, fermentation, lactic acid bacteria 3722.
 microfilaments, isolation, characterization, plasmids, *Physarum polycephalum* 5964.
 Mycobacterium, purification, specificity, use, hemagglutination, hemagglutination inhibition 9290.
 Mycobacterium tuberculosis, immunoglobulin G, detection, enzyme-linked immunosorbent assay, cerebrospinal fluid, meningitis, man 6773.
 nodules, *Pisum sativum* roots, *Rhizobium leguminosarum* interaction 4644.
 nutrient requirements, bacitracin biosynthesis, *Bacillus licheniformis* 1403.
 nutritive value, aflatoxins food contamination effects on, chickens 5352.
 pathogenesis relationship, purification, potato spindle tuber virus infected *Lycopersicon esculentum* 8853.
 pili, *Bacteroides nodosus*, agglutination, absorption, bioassays, methodology 678.
 pili, *Escherichia coli*, subunit structure, purification, characterization, hemagglutination 4252.
 polysaccharides conjugate, vaccines, preparation, gram-negative bacteria, immunogenicity 2323.

Proteins, (continued)

production, *Candida* *ingens* fermentation, animal wastes treatment 158.
 production, olives food processing wastes, fungi biodegradation 871.
 production, optimization, genetic engineering, *Escherichia coli*, *Bacillus subtilis*, yeasts 3423.
 production, optimization, isolation, purification, genetic engineering, *Escherichia coli* 3425.
 purification, affinity chromatography, use transition metals chelates 3430.
 purification, bioreactors 3427.
 purification, characterization, respiratory syncytial virus, temperature-sensitive mutant, infected cell culture 3437.
 purification, electroanalysis 3428.
 purification, high-performance liquid chromatography, use vaccines, *Sendai virus* 6649.
 purification, immobilization, monoclonal antibodies 3429.
 purification, precipitation methodology, bioreactors 3426.
 purification, ultrafiltration 3431.
 recovery, fermentation, bacteria, genetic engineering, reviews 7812.
 respiratory syncytial virus, identification, immunoprecipitation, methodology 645.
Streptococcus mutans, cytoplasm, electrophoresis 6806.
 synthetic, antigenic determinants, vaccines production, immunogenicity, herpes simplex virus 6639.
 textured soy protein, beef, minced meat, acidification bacteria growth spoilage 6987.
 utilization, ducks, aflatoxins dietary intake effects on 3721.
 viruses (inactivators, purification, characterization, electron microscopy, Bombyx mori 9113.
 yeasts, rheology 5321.
Proteolysis
 bacteria growth, meat isolates 1059.
 dairy starters, temperature effects on, cheese 1907.
 milk, *Streptococcus cremoris*, proteinase, plasma membranes localization, role peptides transport 1747.
 proteinase, purification, *Streptomyces cellulosa* 7691.
 renin, cheese, *Mucor pusillus*, *Mucor rohei*, *Endothia parasitica* 2741.
 role, dextranase multiple forms, purification, characterization, *Streptococcus sanguis* 6045.
 silage 1068.
Proteolytic enzymes
 activity, detection, bacteria, association, biodegradation, leather, parchment 8693.
 activity, storage, foot-and-mouth disease virus 6741.
 activity, *Zea mays*, disease resistance, host-pathogen interactions, *Erwinia chrysanthemi* 3860.
 applications, industries, technology 50.
Bacillus subtilis, extraction, oils seeds, *Brassica napus*, *Glycine max* 3494.
Bacillus subtilis, inhibition, quaternary ammonium compounds 4957.
 bacteria, spoilage, milk, shelf life, refrigeration, pasteurization 6175.
 biosynthesis, amino acids effects on, *Bacillus thuringiensis* 6029.
 Chilo idesent virus, activity 1737.
 fungi, chymosin dairy products, dairy industry 199.
 isoelectric focusing, *Streptomyces* 4288.
 lactic acid bacteria, characterization, role, milk products production, reviews 96.
 lactic acid bacteria, cheese production, aflatoxin B1 effects on 8730.
 microorganisms, cleaning, membranes, filtration, industrial water systems 57.
 psychrotrophic bacteria, dairy products isolates 1057.
 purification, *Bacillus mesentericus* 4337.
 purification, isolation, *Rhizopus pygmaeus* 4321.
 renin, production, *Basidiomycetes* 6829.
 stability, phosphogluconate dehydrogenase, comparison *Bacillus stearothermophilus*, yeasts 73.
 yeasts, food contamination, seafood 5340.
Proteus
 airborne microorganisms analysis, trains bathrooms 579.
 antibacterial activity, fludeaniline+penitidone 6454.
 antibacterial activity, mangostin, derivatives, isolation, *Garcinia mangostana* 4783.
 antibiotic resistance 6440.
 antibiotic resistance, clinical isolates 7328.
 antibiotic resistance, screening 7315.
 antibiotic sensitivity testing, media (culture), methodology 433.
 antibiotic sensitivity testing, photometry, computer applications 3076.
 clinical isolates, azlocillin antibiotic resistance 5715.
 netilmicin sensitivity 6401.
Proteus mirabilis
 antibiotic resistance 6440.
 antibiotic resistance, clinical isolates 7328.
 antibiotics antibacterial activity determination, counting methods 2239.
 catalase, purification, characterization 1778.
 cephalothin antibiotic sensitivity testing, quality control 4828.
 clinical isolates, bactericidal activity, antibacterial activity, dibekacin, gentamicin, tobramycin 6540.
 β -lactamase, carbencillin hydrolysis 2619.
Proteus morgani
 β -lactamase, biosynthesis, inducers, correlation, penicillins, antibacterial activity 2261.
Proteus penneri
 antibiotic sensitivity testing 9162.
Proteus rettgeri
 β -lactamase, biosynthesis, inducers, correlation, penicillins, antibacterial activity 2261.
Proteus stuartii
 cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1388.
Proteus vulgaris
 antibiotic resistance 6440.
 antibiotic resistance, clinical isolates 7328.
 cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1388.
 fuel cells, electron transfer, redox potential mediators 5243.

Proteus vulgaris, (continued)

- inhibitors, trypsin, chymotrypsin, purification, characterization 6810.
 β -lactamase, antibiotic resistance, cephalosporins 2194.
 β -lactamase, biosynthesis, inducers, correlation, penicillins, antibacterial activity 2261.
 β -lactamase, carbapenems, derivatives, inactivation 4862.
 β -lactamase, cefoxitin stability 1394.
 β -lactamase, imipenem, inhibition 2317.
Protocatechuate 3,4-dioxygenase,
 2-hydroxypyridine N-oxide analogs binding, inhibition, *Pseudomonas aeruginosa* 688.
 purification, affinity chromatography, characterization, *Pseudomonas fluorescens* 3486.
Protocatecholic acid,
 biodegradation, protocatecholate dioxygenase, purification, *Pleurotus ostreatus* 7754.
Protocatecholate dioxygenase,
 purification, biodegradation, protocatecholic acid, *Pleurotus ostreatus* 7754.
Protomyces macrosporus,
 galls, leaves, biological control, *Torilis japonica* 8029.
Protone,
 ATP stoichiometry, N.M.R., membrane potential, adenosinetriphosphatase, mutants, *Escherichia coli* 8531.
 pumps, *Cercospora beticola* phytotoxins inhibition, microsomes, *Pisum sativum* 8744.
 pumps, membrane potential, fusicoocin effects on, roots, *Zea mays* 8739.
 pumps, respiration (cyanide insensitive), *Ilex pachydon*,
 methyl- α -hydroxamidoacetate effects on, *Triticum aestivum* 8745.
 uptake, *Pisum sativum*, *Cercospora beticola*, toxins, inhibition 7122.
Protoplast,
 Mycobacterium paratuberculosis, peptides, enzyme-linked immunosorbent assay methodology, paratuberculosis diagnosis, cattle 4185.
Protoplast fusion,
 auxotrophy, *Rhizoctonia solani* 5081.
Bacillus sphaericus, transformation, plasmid pUB110, plasmid pBC16, sporulation, biological control, *Culicidae* 2666.
 fungi, reviews 6801.
 penicillin biosynthesis, genes linkage analysis, *Aspergillus nidulans*,
Aspergillus rugulosus 4047.
 Saccharomyces carlsbergensis, fermentation, brewing 2687.
 Saccharomyces cerevisiae + Saccharomyces diastaticus, media (culture) 5925.
 Saccharomyces cerevisiae + Saccharomyces mellis, fermentation association 971.
 soy sauce production, *Aspergillus oryzae* 4451.
 Streptomyces viridosporus, Streptomyces setonii, enhancement, biodegradation, lignin 2702.
 transformation, lac plasmid, dairy starters, *Streptococcus lactis* 8702.
Protoplasts,
 Acer pseudoplatanus, fusicoocin effects on pH 7110.
Bacillus colistinus, plasma membranes, role antibiotic resistance, colistin 9074.
Bacillus subtilis, gramicidin S cytolytic 7467.
 biotechnology, conferences, books 3359.
 biotechnology, conferences, books 5948.
 Brassica rapa, turnip rosette virus RNA replication 2045.
 dermatophyte fungi, isolation, methodology 8483.
 Dianthus caryophyllus, carnation mottle virus infection 285.
 disease resistance, plant viruses, plant breeding 3766.
 echinomyxin biosynthesis, Streptomyces echinatus 8369.
 enzymes, lignin biodegradation, *Fomes annosus* 8673.
 formation, methodology, *Bacillus brevis* 1632.
 induction, *Bifidobacterium bifidum* 6752.
 isolation, centrifugation, density gradients, methodology, *Saccharomyces cerevisiae* 9334.
 lectins, *Triticum aestivum*, host-pathogen interactions, rust, *Puccinia graminis* 8091.
 Nicotiana tabacum mesophyll, tobacco mosaic virus coat protein, mRNA characterization 286.
 plant viruses infection, models 3765.
 plants, tobacco mosaic virus RNA detection, hybridization analysis, enzyme-linked immunosorbent assay 4459.
 production, use transformation, dairy starters, lactic acid bacteria 5952.
 transformation, plasmids DNA, gene transfer, *Corynebacterium glutamicum* 6059.
 Trifolium repens, detection, *Rhizobium leguminosarum* var. trifolii, fluorescence, microscopy 9297.
 Trifolium repens, *Rhizobium leguminosarum* var. trifolii eradication, phages use 6658.
 trioxin conversion, echinomyxin production, Streptomyces echinatus 3133.
 Vigna unguiculata, cowpea mosaic virus interaction 247.
Protozoa,
 incidence, industrial effluents, breweries 3208.
Providence,
 antibacterial activity, antibiotic K-4619 7479.
 antibiotic sensitivity testing, photometry, computer applications 3076.
 netilmicin sensitivity 6401.
Providence rettgeri,
 metabolism, carbon monoxide, carbon dioxide, methanol, fuels production 5312.
Providence stuartii,
 antibacterial activity, fudalanine + pentazolidone 6454.
 drug resistance, nosocomial infection etiology 6410.
Proviruses,
 T cell leukemia virus, DNA hybridization analysis, leukemia cells 5884.
Prune dwarf virus,
 detection, Citrus, enzyme-linked immunosorbent assay 6249.
 detection, Prunus, enzyme-linked immunosorbent assay 6251.
 infection, Prunus cerasus, enzyme-linked immunosorbent assay detection 8804.
Prunella,
 disease control, canker, Botryosphaeria dothidea, Mulus pumila, USA, Georgia 3900.
 disease control, Ceratocystis fimbriata, wilt, Brazil, Mangifera indica 5440.
 Humulus lupulus, disease control, downy mildew, Pseudoperonospora humuli, reviews 1170.
 natural, Fagus sylvatica, fungal flora association 2105.
 wound infection, Botryosphaeria dothidea, Botryosphaeria ribis, disease control, benomyl + captan, Prunus persica 8913.
 wound infection, Cytophora, dieback, Prunus persica 8805.
 wounds, Trichoderma viride + fungicides, integrated control, Chondrostereum purpureum, spore germination, silver-leaf disease, Prunus domestica 5588.

- Prunus**,
 canker, Pseudomonas syringae pv. syringae, South Africa 274.
 detection, prunus necrotic ringspot virus, prune dwarf virus, enzyme-linked immunosorbent assay 6251.
 disease control, fungicides, new records 339.
 infection, Prunus necrotic ringspot virus, green ring mottle virus-like particles, ribavirin foliar applications effects on 3902.
 leaves, Pseudomonas syringae pv. morsprunorum infection, scanning electron microscopy 2801.
 Xiphinema californicum, role, disease transmission, tomato ringspot virus 4529.
Prunus americana,
 Phellinus punctatus incidence, USA, North Dakota 3838.
 western X disease, mycoplasma-like organisms, disease spread 2802.
Prunus amygdalis,
 crown gall, biological control, Agrobacterium radiobacter 335.
 nuts, food contamination, Aspergillus flavus aflatoxins levels 7101.
 Fusicoccum amygdali infection, fusicoocin, translocation 8809.
Prunus armeniaca,
 canker, Pseudomonas syringae pv. syringae, South Africa 274.
 Eutypa armeniaca dieback, spores dispersal 1152.
 Monilinia laxa, benomyl resistance, detection, characterization 1139.
 wound infection, Eutypa armeniaca, biological control, antagonism, conidia, Fusarium laterum 6307.
Prunus avium,
 canker, Pseudomonas morsprunorum 5438.
 mosaic disease, Prunus necrotic ringspot virus, enzyme-linked immunosorbent assay detection, use, disease control, USA, Washington 3812.
 tissue culture, growth, Gigaspora margarita 5926.
 transmission (vertical), cherry leaf roll virus, virus-like particles, localization, pollen, anthers 7990.
Prunus cerasifera,
 infection, tomato ringspot virus 7997.
 × Prunus domestica, rootstocks, hybrids, susceptibility, tomato ringspot virus infection 4528.
Prunus cerasus,
 canker, Pseudomonas syringae pv. morsprunorum, disease control, copper sulfate, fatty acids copper salts 344.
 Prunus dwarf virus infection, enzyme-linked immunosorbent assay detection 8804.
Prunus domestica,
 infection, tomato ringspot virus 7997.
 infection, Xanthomonas campestris pv. pruni, scanning electron microscopy 7158.
 × Prunus cerasifera, rootstocks, hybrids, susceptibility, tomato ringspot virus infection 4528.
 × Prunus persica, rootstocks, hybrids, susceptibility, tomato ringspot virus infection 4528.
Prunus dulcis,
 Pseudomonas syringae pv. syringae infection, pathology 7165.
Prunus necrotic ringspot,
 transmission (seed), Prunus spinosa, characterization 8003.
Prunus necrotic ringspot virus,
 detection, Citrus, enzyme-linked immunosorbent assay 6249.
 detection Prunus, enzyme-linked immunosorbent assay 6251.
 infection, Prunus, ribavirin foliar applications effects on, 3902.
 mosaic disease, Prunus avium, enzyme-linked immunosorbent assay detection, use, disease control, USA, Washington 3812.
 rose mosaic disease, Rosa corymbifera 8820.
Prunus persica,
 canker, Pseudomonas syringae pv. syringae, South Africa 274.
 canker, virulence, Pseudomonas syringae pv. syringae 8810.
 cell culture, Xanthomonas campestris pv. pruni, toxicity, detection, bioassays, association, membrane potential 9156.
 crown gall, biological control, Agrobacterium radiobacter 334.
 crown gall, biological control, Agrobacterium radiobacter 335.
 disease resistance plant breeding screening projects, inoculation methodology, Cytophora leucostoma 5487.
 fruits, in vitro, in vivo, temperature effects on Monilinia fructicola conidia germination, size, pathogenicity 7992.
 infection, tomato ringspot virus 7997.
 orchards, dibromochloropropane, disease control, Crotonemella xenophas, effects on Fusarium, Pythium, roots necrosis, Prunus persica 7164.
 orchards, soil microorganisms CGA-15281 biodegradation, structure-activity relationships 5686.
 overwintering, Pseudomonas syringae pv. syringae 6247.
 pruning, wound infection, Botryosphaeria dothidea, Botryosphaeria ribis, disease control, benomyl + captan 8913.
 pruning, wound infection, dieback, Cytophora 8805.
 × Prunus domestica, rootstocks, hybrids, susceptibility, tomato ringspot virus infection 4528.
 stem pitting, tomato ringspot virus, disease reservoirs, Taraxicum officinale, vectors, Xiphinema, USA, Pennsylvania 8811.
 tomato ringspot virus infection, detection, enzyme-linked immunosorbent assay 3813.
 xylem, water potential, phony disease, bacteria 8879.
Prunus persica nectarina,
 fruits, in vitro, in vivo, temperature effects on Monilinia fructicola conidia spore germination, size, pathogenicity 7992.
Prunus salicina,
 canker, Pseudomonas syringae pv. syringae, South Africa 274.
Prunus spinosa,
 transmission (seed), Prunus necrotic ringspot, characterization 8003.
Prunus virginiana,
 Phellinus punctatus incidence, USA, North Dakota 3838.
 western X disease, mycoplasma-like organisms, disease spread 2802.
Pseudocercospora vitis,
 foliar diseases, seasonal variations, Vitis vinifera 8016.
Pseudocercospora helipotrichoides,
 carbendazime resistance 5721.
 cytopathology, histopathology, disease resistance, Triticum aestivum 7976.
 disease resistance, eye spot, genes, Aegilops ventricosa, transfer, Triticum aestivum 8078.
 drug sensitivity testing, benomyl 3899.
 endo-1,3- β -D-xylanase, cellulase, α -L-arabinofuranosidase, biosynthesis, activity, isolation, characterization 7761.
 eye spot, Gramineae, spores, dispersal, inhibition, cellulase xanthate 8058.

Pseudocercospora herpeticoides, (continued)

eye spot, relationship, *Triticum aestivum* respiration 2795.
eye spot, *Triticum aestivum*, carbendazim resistance association treatment 8129.
eyespot, *Triticum aestivum*, factors affecting spore germination 7146.
eyespot, spores dispersal, rainfall, wind, straw, *Triticum aestivum* 1997.
infection susceptibility, varieties, *Triticum aestivum* 7975.
spores, dispersal, rainfall, plant diseases 1109.

Pseudococcus longispinus

vectors, disease transmission, grapevine virus A, plant diseases, *Vitis vinifera* 3844.

Pseudogymnoascus

soil isolates, cyanuric acid, biodegradation 1894.

Pseudomonas

alcohol oxidase, polyvinyl alcohol biodegradation 2710.
alginate acid, biosynthesis, industrial applications 8618.
alkyl sulphatase, purification, characterization, detergents biodegradation 4343.
alkylsulphatase activity, wastewater treatment 6030.

antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 6465.
antibacterial activity, spices, *Salvia officinalis* 8719.
antibiotic RU 28965, antibacterial activity 4878.

antibiotic sensitivity testing, cefotaxime, disc-diffusion test 1387.

antibiotic sensitivity testing, photometry, computer applications 3076.

benzoic acid biodegradation kinetics 6944.

biodegradation, aromatic compounds + halogens, mechanisms, reviews 7826.

biodegradation, nutrient sources, N-(phosphonomethyl)glycine 8684.

biodegradation, phthalic acid, reviews 7828.

biodegradation, resistance, heavy metals pollution 3680.

biodegradation, 2-chloro-1,3,5-triazine-4,6-diamine 7834.

biological control, *Ophiostoma ulmi*, Dutch elm disease 2081.

biotin derivatives biosynthesis, peltaric acid metabolism 4393.

black rot, Cruciferae, epidemiology, Thailand 287.

canker, *Actinidia chinensis*, pathogenesis, USA, California 275.

ceftriaxone antibacterial activity, agar diffusion test 1392.

cell membranes, polyvinyl alcohol oxidation enzymes, purification, characterization 1742.

cellulose decomposition, soil 6339.

chlorophenol biodegradation, wastewater treatment 182.

cholic acid biodegradation, anaerobic conditions 4427.

clinical isolates, antibacterial activity, aminoglycoside antibiotics 7444.

clinical isolates, antibacterial activity, bactericidal activity, dibekacin, gentamicin, tobramycin 6540.

clinical isolates, moxalactam, antibacterial activity 5768.

colonization, stimulation seedlings growth, *Hordeum vulgare* 3936.

creatininase, creatinase, immobilized enzymes, use electrodes, creatine, creatinine 89.

crown gall, plants, opines utilization 7131.

degradation, aromatic compounds, effects on phytotoxicity, allelopathy, growth, *Triticum aestivum* 373.

denitrification, nitrogen cycle, soil, reviews 4655.

denitrification, waste water, association, aeration 1466.

deoxycholic acid biodegradation, anaerobic conditions 6154.

dibenzothophene biodegradation, reviews 7825.

disinfection, sterilization, environmental hygiene 1516.

enzymes, separation, cells, extracts, ultrafiltration, factors affecting 6019.

eugenol biodegradation pathway 4421.

fermentation, methanol monitoring, dissolved oxygen, computer applications, batch culture 8633.

flagellin, isolation, characterization 11.

floculation mutants, deoxyribonuclease susceptibility 4929.

fluorescence pigments production, media (selective) 7608.

food contamination, chickens, volatiles production 5317.

glycosaminase, purification, characterization, peptide mapping, comparison

Pseudomonas aeruginosa 4290.

growth rate, measuring techniques, continuous culture 1639.

hycostene biosynthesis 4263.

hydrocarbons biodegradation, mechanisms 3988.

hydrocarbons biodegradation, plasmids, genetic analysis, reviews 8284.

hydroxycholic acid conversion, anaerobic conditions, products identification 876.

immobilized cells, phenylalanine, conversion, tyrosine 875.

inoculation, rhizosphere, yield stimulation, *Parthenum argentatum* 8213.

inostil-binding protein, purification, characterization 5955.

isolation, antibiotics production industrial wastes, R factors characterization, antibiotic resistance 2208.

isolation, rhizosphere, *Oryza sativa*, nitrogen fixation 5653.

β -lactam antibiotics antibacterial resistance, β -lactamase role 438.

isolate, *Sinergia speciosa* 6273.

levels, grain dust, gram-negative bacteria 7109.

metabolism, furan, tetrahydrofuran, reviews 7824.

metabolism, homocysteine methylation, L-methionine production 4264.

methylethyl chloride, metabolism, biodegradation 3661.

monosodium methanearsonate, metabolism, conversion 1284.

mycobacterium, mixed culture, hydrocarbons oxidation 7312.

nitrous oxide bioaccumulation, reduction inhibition, oxygen association 2157.

oil dispersants biodegradation, sea water 1876.

organic compounds biodegradation, genetics, reviews 1013.

L-phenylalanine assays, use L-phenylalanine oxidase, methodology 5150.

plant diseases, diagnosis 3780.

plant diseases, diagnosis, characterization 3774.

plant diseases, *Triticum aestivum*, roots, susceptibility 6242.

proteinase electrophoretic mobility, isolation wool, sheep 1753.

proteolytic enzymes, dairy products isolates 1057.

quaternary ammonium compounds biodegradation, industrial wastes 1017.

γ radiation disinfection, sewage sludge 5823.

reactors, cutting fluids biodegradation, bacteria identification 178.

seed treatments, antagonism, pathogens, *Solanum tuberosum* 2831.

siderophores, amino acid sequence 8518.

siderophores, antagonism, phytopathogenic fungi, *Erwinia*, rhizosphere, *Solanum tuberosum* 2830.

soft rot, isolation methodology 1089.

soil microorganisms, methoxychlor effects on, biodegradation 9024.

soil, smoke preservation, seafood, *Scorimbridae* 8718.

spillage, vacuum packaging, films, oxygen permeability, mutton 5362.

spillage, vacuum packaging, nitrogen packaging, luncheon meat 8715.

thiotropin, structure 6551.

Pseudomonas, (continued)

TOL plasmid, biodegradation, aromatic hydrocarbons, chlorination 5313.

s-triazine biodegradation 4426.

1,3,5-triazine biodegradation, wastewater treatment 2698.

vanillic acid, catabolism, association, biodegradation 1000.

Pseudomonas aeruginosa

acyl-CoA synthetase, bioassays, fatty acids serum levels 586.

airborne microorganisms analysis, trains bathrooms 579.

alginate acid, binding, antibiotics, role, antibiotic resistance 6411.

aminoglycoside antibiotics dilution tests 1408.

aminoglycoside antibiotics, outer membranes interaction 9176.

animal isolates, horses, drug sensitivity testing, EDTA tris lysosome effects on 2253.

antibacterial activity, acetylonyl salicylate 6464.

antibacterial activity, amikacin, aztreonam, cephalosporins 7377.

antibacterial activity, ampicillin \pm streptomycin, \pm chloramphenicol, antibiotic synergism 8349.

antibacterial activity, antibiotic antagonism, thienamycin, piperacillin 7442.

antibacterial activity, antibiotic K-4619 7479.

antibacterial activity, antibiotic synergism, L-alanyl-L-1-aminoethylphosphonic acid + nocardin A 6554.

antibacterial activity, apalcillin 4840.

antibacterial activity, apalcillin 9192.

antibacterial activity, apalcillin, comparison, piperacillin, carbenicillin 6527.

antibacterial activity, azlocillin 7412.

antibacterial activity, azlocillin + sisomicin antibiotic synergism, kinetics 4836.

antibacterial activity, aztreonam: β -lactam antibiotics, \pm amikacin 3156.

antibacterial activity, aztreonam, antibiotic synergism 6504.

antibacterial activity, ceftazidime 4827.

antibacterial activity, cephalosporins 4825.

antibacterial activity, ciprofloxacin 4745.

antibacterial activity, ciprofloxacin 4746.

antibacterial activity, enoxacin 9090.

antibacterial activity, fludalanine + penicillin 6454.

antibacterial activity, mangostin, derivatives, isolation, *Garcinia mangostana* 4783.

antibacterial activity, mezlocillin, piperacillin, azlocillin 7431.

antibacterial activity, norfloxacin 9100.

antibacterial activity, temocillin, antibiotic synergism, β -lactam antibiotics 3122.

antibacterial activity, WIN 49375 9091.

antibacterial activity, 1-(hydroxymethyl)-2,1-benzisoxazol-3(1H)-one analogs 9140.

antibiotic resistance, β -lactam antibiotics, lipopolysaccharides structure, membrane permeability 7349.

antibiotic resistance, colonial characteristics 526.

antibiotic resistance, cross-resistance, cephalosporins, penicillins 7352.

antibiotic resistance, screening 7315.

antibiotic resistance, surveys, British Isles 9059.

antibiotic sensitivity testing 3079.

antibiotic sensitivity testing, β -lactam antibiotics 4801.

antibiotic sensitivity testing, antibiotic HR810 6511.

antibiotic sensitivity testing, antibiotic SK&F 88070 6510.

antibiotic sensitivity testing, avoparcin, flavomycin, virginiamycin 9215.

antibiotic sensitivity testing, cefoperazone 503.

antibiotic sensitivity testing, cephalosporins, moxalactam, cefotaxime 1383.

antibiotic sensitivity testing, clinical isolates, epidemiology, hospitals 4800.

antibiotic sensitivity testing, cystic fibrosis clinical isolates 9179.

antibiotic sensitivity testing, measuring techniques, automated methods comparison 3081.

antibiotic synergism, aminoglycoside antibiotics + β -lactam antibiotics 4807.

antibiotic synergism antibacterial activity, β -lactam antibiotics + amikacin 1391.

antibiotics antibacterial activity determination, counting methods 2239.

antiseptics antibacterial activity, surfactants effects on 9261.

AutoMicrobic test, antibiotic sensitivity testing, gentamicin, tobramycin, amikacin 5778.

azlocillin antibacterial activity, disc-diffusion test quality control 2262.

azurin, N.M.F. 2564.

azurin, N.M.F. 6928.

bacterial activity, antibiotic antagonism, antibiotic synergism, β -lactam antibiotics, aminoglycoside antibiotics 7403.

bacterial activity, azlocillin, ticarcillin, dilution tests, comparison, agar diffusion test 4841.

bacteriostasis, catecholamide, iron catecholamide 448.

biohaz, contamination, skin infection, man 566.

biodegradation, disinfectants, acclimatization, activated sludge 4112.

biodegradation, hydrocarbons, industrial effluents, oil and gas industry, wastewater treatment, Egypt 2190.

capsules antigens, use complement fixation assays 2467.

Carapa papaya plant extracts antibacterial activity 2220.

catabolism pathway, evolution, enzymes activity, reviews 7821.

cefoperazone antibacterial activity comparison, cephalosporins, N-formimidoyl thienamycin 508.

ceftazidime, antibacterial activity, inhibition, β -lactamase 4830.

ceftazidime antibacterial activity 6507.

ceftazidime antibacterial activity, agar diffusion test 2259.

ceftriaxone antibacterial activity, agar diffusion test 1392.

chemotaxis, distilleries, effluents, coastal waters 560.

chloramines disinfection, pH effects on 9246.

clinical isolates, β -lactamase activity, carbenicillin 7345.

clinical isolates, antibacterial activity, ceftazidime: gentamicin 6516.

clinical isolates, antibacterial activity, netilmicin 9204.

clinical isolates, antibiotic resistance, aminoglycoside antibiotics, Turkey, USA 2195.

clinical isolates, antibiotic resistance, antibacterial activity, amoxicillin + clavulanic acid 7438.

clinical isolates, antibiotic sensitivity testing, aminoglycoside antibiotics, disc-diffusion test, statistical analysis 479.

clinical isolates, azlocillin antibiotic resistance 5715.

clinical isolates, cystic fibrosis, children, antibiotic sensitivity testing, amikacin, antibiotic synergism, aztreonam, piperacillin, ticarcillin 3170.

clinical isolates, Nigeria, antibiotic sensitivity testing 7416.

clinical isolates, norfloxacin, antibacterial activity 4752.

Pseudomonas aeruginosa, (continued)

- contamination, iodophors, association, polyvinyl chloride, role, survival 6723.
 contamination, iodophors, characterization 7539
 continuous culture, lipids production, surfactants 4922.
 corrosion, dental restorative materials, plastics 6965.
 cross-resistance, cinoxacin, ciprofloxacin, antibiotic DJ-6783, enoxacin, nalidixic acid, norfloxacin, oxolinic acid 6421.
 cytochrome peroxidase, cyanide, azide, fluoride binding, E.S.R. 3469.
 cytotoxins, pathogenicity, *Manduca sexta* biological control, reviews 5211.
 disinfectants antibacterial activity, surfaces types 5862.
 drug resistance, norfloxacin, nalidixic acid 4700.
 empyema clinical isolates, β -lactam antibiotics antibacterial activity 497.
 ethambutol, inhibition, spermidine synthase 7353.
 exfolisin A, hybrids, biotechnology, genetic engineering 7121.
 extracellular proteinase, purification, characterization 1812.
 R factors, antibiotic resistance, transfer, *Escherichia coli*, clinical isolates, neonates, man 9043.
 folliculitis, spas, baths, case reports, man 7530.
 M form defective mutant, alginate acid role, lipase stimulation 2570.
 gentamicin, antibacterial activity, urine, pH, osmotic potential effects on 3108.
 gentamicin, antibiotic resistance, lipopolysaccharides structure 7350.
 gentamicin, antibiotic sensitivity testing, quality control, mathematical models 1400.
 gentamicin bacteriostasis, bone fatty acids, synergism, antagonism 4052.
 glycoxyaminase, purification, characterization, peptide mapping, comparison, *Pseudomonas* 4290.
 glycaminephosphate isomerase (glutamine-forming) activity, anticapsin inactivation 6043.
 hydrocarbons biodegradation 4683.
 ice nucleation activity, *Citrus sinensis*, *Citrus aurantium* 2805.
 incidence, drinking water, Hungary 4939.
 indicator species, chlorination, swimming pools 567.
 indicator species, domestic wastes 2342.
 indicator species, pollution control, water reclamation 2394.
 interference membrane filtration, coliforms, drinking water 2391.
 isolation, food, hospitals, kitchens 5347.
 isolation, media (selective) 6783.
 β -lactam antibiotics, antibiotic synergism, aminoglycoside antibiotics, antibiotic sensitivity testing 7417.
 β -lactamase, antibiotic resistance, β -lactam antibiotics 9082.
 β -lactamase, association, antibiotic resistance, piperacillin, ceftazidime, cefsulodin 4696.
 β -lactamase, carbenicillin hydrolysis 2619.
 β -lactamase, detection, iodometry, micromethods 8562.
 β -lactamase (culture), enhancement, plasmids, production 7617.
 membrane permeability, antibiotic resistance, β -lactam antibiotics 9081.
 α -methylstyrene biodegradation, bacteria 2700.
 microbial pollution, estuaries 6713.
 nitellium agar diffusion test 4865.
 nitrifying bacteria, nitrification, denitrification, soil 3966.
 nitrite reductase (cytochrome) reduction, nitrite, denitrification, reviews 7708.
 nitrite reductase (cytochrome) reduction, nitrite, stoichiometry, nitrous oxide production 7709.
 nitrogen sources, quinoline biodegradation kinetics 6951.
 nocardicin A, effects on, morphology, scanning electron microscopy 9216.
 norfloxacin disc-diffusion test, bacteria, standardization 3047.
 norfloxacin drug sensitivity testing 9095.
 oil oxidation 7311.
 pathogens, toxicity, biological control, *Solenopsis richteri*, *Solenopsis invicta* 5257.
 penicillin-binding protein, binding, aminobenzy-penicillin apicalin, characterization 7432.
 petridiscocollaps, chemical composition 966.
 peritonitis, disease control, U.V. radiation, decontamination, dialysis, man 6718.
 phages infected, polymyxin B induction lysis 4856.
 piperacillin antibacterial activity 6526.
 plasmid pVS1, mercuric reductase, NADPH reaction, kinetics, mechanisms 1762.
 proteinase, extracellular enzymes, stimulation, whey, casein 1810.
 protocatechuic 3,4-dioxygenase, 2-hydroxyphenyl-N-oxide analogs binding, inhibition 888.
 serum bactericidal activity, aztreonam, \pm cefeprozene, \pm amikacin 8344.
 siderophores structure 870.
 slimes, spoilage, milk 6176.
 sodium alginate extracellular polymers antibodies, detection, enzyme-linked immunosorbent assay 761.
 surfaces colonization, mathematical models, continuous culture 5059.
 survival, oil samples 9040.
 toxins, production, genetic analysis, immunogenicity 540.
 trimethoprim, drug resistance, characterization 9079.
 urinary tract clinical isolates, identification, antibiotic sensitivity testing, methodology 3315.
 vaccines, development, immunogenicity, mice 6663.
 wild type, envelopes mutants, sensitivity, association, antibiotics, preservatives, cell membranes role 3080.
- Pseudomonas atitica**
 β -agarase, purification, characterization 887.
- Pseudomonas aureofaciens**
 hydrocarbons, metabolism, wells contamination 1497.
 nitrifying bacteria, nitrification, denitrification, soil 3966.
 phenazines, biodegradation 2716.
 pyrrolinins derivatives, biosynthesis 3139.
- Pseudomonas caryophylli**
 crown rot, leaf rot, *Limonium sinuatum*, etiology 4560.
- Pseudomonas cepacia**
 bactericidal activity, povidone-iodine 452.
 biodegradation, 2,4,5-T soil pollution 3679.
 2-chlorobenzoic acid utilization 6954.
 clinical isolates, cystic fibrosis, children, antibiotic sensitivity testing, amikacin, antibiotic synergism, aztreonam, piperacillin, ticarcillin 3170.
 \pm Frankia, *Alnus rubra* nodulation 4600.
 serotyping methodology, rabbits antisera 1536.
 TOL plasmid, biodegradation, aromatic hydrocarbons, chlorination 5313.
- Pseudomonas cichorii**
 dwarf blight, *Schefflera arboricola* 1162.
 inoculation, spot pathogenesis, *Pelargonium hortorum*, *Chrysanthemum morifolium*

Pseudomonas cichorii, (continued)

- 4537.
- Pseudomonas corrugata**
 necrosis, immunodiagnosis, enzyme-linked immunosorbent assay, *Lycopodium obscurum* 5835.
- Pseudomonas dacunhae**
 immobilized cells, ammonium fumarate conversion, L-alanine 7.
 polyurethane immobilization, aspartate 4-decarboxylase activity, L-alanine biosynthesis 8525.
- Pseudomonas denitrificans**
 5-aminolevulinic acid synthase, mediation, betaine, stimulation, cyanocobalamin, biosynthesis 6094.
 betaine, stimulation, cyanocobalamin, production, association, protein biosynthesis 4401.
 nitrate reductase, purification, characterization 6046.
 nitrifying bacteria, nitrification, denitrification, soil 3966.
 nitrogen containing aromatic compounds, biodegradation 1005.
 2,4,6-trinitrotoluene biodegradation 4432.
- Pseudomonas desmoltitum**
 oil oxidation 7311.
- Pseudomonas elodes**
 gels, extracellular polymers, polysaccharides, carbohydrate composition 4369.
 gums, polysaccharides, extracellular polymers, carbohydrate composition 4366.
- Pseudomonas fluorescens**
 antibiotics production, stimulation, rats growth, *Citrus jambhiri*, *Citrus sinensis* 5625.
 antimicrobial activity, flavorings 9143.
 azurin, fluorescence, role copper 309.
 carboxylase, purification, characterization, electrophoresis 6869.
 β -D-glucosidase activity effects on dairy products shelf life 6197.
 growth, nitrogen sources, cyanide biodegradation, ammonia biosynthesis 1877.
 lupine dehydrogenase, isolation, characterization 6009.
 plasmids, biodegradation, ethylbenzene, 1-phenylethanol 4425.
 proteinase, peptides hydrolysis 1809.
 proteinase production, nutrient availability, carbon sources, nitrogen, phosphate 7749.
 protocatechuic 3,4-dioxygenase purification, affinity chromatography, characterization 4496.
 pseudomonin, N.M.R. 7457.
 pyoluteorin biosynthesis, soil, use biological control, damping-off, *Pythium ultimum* 2888.
 safracin, fermentation, antitumor activity 958.
 seed treatments, biological control, *Gaeumannomyces graminis* var. *tritici*, *Triticum aestivum* 336.
 triacylglycerol lipase, chemical modification, benzene interaction 6033.
 triacylglycerol lipase, fluorometry, milk 21.
 triacylglycerol lipase, heat inactivation 5146.
 triacylglycerol lipase production, carbon sources 1806.
 triacylglycerol lipase, purification, characterization 4283.
- Pseudomonas geniculata**
 antimicrobial activity, flavorings 9143.
- Pseudomonas gladioli**
 etiology, leaf spot, leaf blight, *Asplenium nidus* 4563.
- Pseudomonas glycinea**
 disease resistance, *Glycine max* leaves, hypersensitive response 319.
- Pseudomonas incognita**
 biodegradation, dihydroalanyl acetate 6957.
- Pseudomonas liquefaciens**
 oil oxidation 7311.
- Pseudomonas maltophilia**
 antibacterial activity, antibiotic synergism, carbenicillin + rifampicin, + gentamicin, + cotrimoxazole 3091.
 antibiotic synergism, carbenicillin + rifampicin, + gentamicin + cotrimoxazole 3091.
 β -lactamase, purification, characterization 4285.
- Pseudomonas melanogenum**
 amoxillin production, β -lactamase deficient mutant 3104.
 Penicillin amidase, synthesis penicillins, cephalosporins 505.
- Pseudomonas mendocina**
 alginate acid biosynthesis 950.
- Pseudomonas morsprunorum**
 canker, *Prunus avium* 5438.
- Pseudomonas putrefaciens**
 in situ freeze-thawing effects on soil microorganisms 4638.
 oxazinomycin, production, characterization 6564.
- Pseudomonas perfectomarinus**
 cytochrome c552, N.M.R. 7710.
- Pseudomonas phaseollica**
 extracellular polymers, polysaccharides, cell adhesion, cell walls, ultrastructure, *Phaseolus vulgaris* 7885.
- Pseudomonas phaseolicola**
 halo blight, disease resistance genes, plant breeding, *Phaseolus vulgaris* 5481.
- Pseudomonas pyrazinellae**
 aspartic acid hydrolases, inhibition, growth 8302.
 identification methodology 2469.
- Pseudomonas putida**
 alcohol dehydrogenase use, alcohols determination methodology 29.
 amino-acid racemase, kinetics, S-(N-methylthiocarbamoyl)-D-L-cysteine, inactivation 9151.
 antagonism, *Erwinia*, biological control, soft rot, post-harvest decay, *Solanum tuberosum* 8112.
 antibiotics production, stimulation, rats growth, *Citrus jambhiri*, *Citrus sinensis* 5625.
 aromatic compounds biodegradation, pathway characterization, plasmids genetic control, reviews 8279.
 biodegradation, chloroacetic dehalogenation? 6159.
 biodegradation, nicotine, enantiomers 6149.
 biodegradation, oxidation, laudanone 2715.
 biodegradation, 2,4-D, phenoxycetic acid, chlorine derivatives, structure-activity relationships, hydrophobicity 1882.
 camphor 5-monooxygenase, puidaredoxin, cytochrome P-450 amino acid sequence 6000.
 S-(carboxymethyl)-D-cysteine biosynthesis 4822.
 catechol 2,3-dioxygenase, inactivation kinetics, 3-chlorocatechol, 3-fluorocatechol 3449.
 3-chlorobenzoic acid biodegradation, plasmids, gene transfer 1008.

Pseudomonas putida, (continued)

- continuous culture, films formation, environmental effects 669.
 continuous culture, nicotine stereoisomers, preparation 132.
 cytochrome P-450 CAM, C.D. 1773.
 cytochrome P-450, heme binding, characterization cysteine residues 910.
 dihydroipamide dehydrogenase, 2-oxoisovalerate dehydrogenase, subunits, amino acid composition, comparison *Escherichia coli* 6831.
 effects on nodulation Glycine soja, cloning DNA sequence, root hairs 6365.
 growth, 2-methoxyethanol fuels, spoilage 3005.
 maize dehydrogenase (oxaloacetate-decarboxylating) (NADP⁺), purification, characterization 5140.
 media (selective) 7608.
 L-methionine γ -lyase, mechanisms, synthesis sulfur, selenium containing amino acids 65.
 L-methionine γ -lyase, purification, characterization 17.
 L-methionine γ -lyase, purification, characterization 6846.
 L-methionine γ -lyase, use, amino acids isotopes radioactive labelling 4311.
 4-methylbenzoate monooxygenase (O-demethylating), putidamonoxin active sites, Mossbauer spectroscopy 5176.
 muconate cycloisomerase, kinetics 908.
 muconate cycloisomerase, kinetics, E.S.R. 906.
 m-nitrophenol, m-nitrophenol, biodegradation 6157.
 packaging, organoleptic evaluation, vacuum packaging, nitrogen packaging, veal 5363.
 polyacrylamide immobilization, effects on morphology, DNA biosynthesis 1614.
 Rhizobium leguminosarum var. phaseoli, nodulation, Phaseolus vulgaris, effects on 5658.
 survival, soil moisture, suppression, Fusarium oxysporum, wilt, Linum usitatissimum 2897.
 thiolester hydrolase, 2-(2,4-dichlorophenoxy)ethyl sulfate activation, soil 880.
Pseudomonas rathonia,
 alkyl sulfonates biodegradation, use wastewater treatment 6952.
Pseudomonas solanaceorum,
 avirulent strains, bacteriocins production, biological control, wilt, Nicotiana tabacum 8113.
 cell adhesion, Nicotiana tabacum cells, leaves cell walls 6282.
 disease resistance, wilt, Solanum sparsipilum, cross-resistance, Meloidogyne 8087.
 inoculation methodology, Solanum tuberosum blight 8871.
 lipopolysaccharides, extracellular polysaccharides, interaction, Solanum tuberosum agglutinins 6285.
 lipopolysaccharides structure, role, hypersensitive response, Nicotiana tabacum 7169.
 peptidylase, polygalacturonase, physicochemical properties 8611.
 plant diseases, soil, population dynamics 6218.
 wilt, Arachis hypogaea, soil, water availability, effects on pathogenesis 249.
 wilt, disease resistance, gemplasm, Solanum seurense, Solanum tuberosum 8090.
 wilt, disease resistance, plant breeding, Capsicum annuum, Capsicum frutescens 8094.
 wilt, host range, crops 7177.
Pseudomonas stutzeri,
 biodegradation, nutrient sources, N-(phosphonomethyl)glycine 8664.
Pseudomonas striata,
 Lens culinaris seed treatments, phosphate fertilizer applications efficiency 1620.
 soil, solubilization, phosphate 6350.
Pseudomonas stutzeri,
 biodegradation, creosote, contamination, aquifers 5815.
 cytochromes redox potential, E.S.R., N.M.R. 7713.
 exo-maltotetrahydrolase isoenzymes, purification, kinetics 1792.
 film resistance, films isolates 4692.
 loach, Coffea arabia, disease control, capitafol 4590.
 lgc, nucleation, activity, pathogenicity, fruit trees 2804.
 infection, stimulation phytoalexins production, host-pathogen interactions, cell culture, Glycine max 2058.
 leafspot, flower blight, Philadelphus coronarius 1160.
 toxins biosynthesis, plant diseases association 6209.
 variants, pathogenesis, plant diseases 3773.
Pseudomonas syringae pv.berberidis,
 etiology, leafspot, leaf fall, Berberis, British Isles 8873.
Pseudomonas syringae pv.glycinea,
 blight, Glycine max, epidemiology 3799.
Pseudomonas syringae pv.morsprunorum,
 infection, scanning electron microscopy, leaves, Prunus 2801.
 canker, disease control, copper sulfate, fatty acids copper salts, Prunus cerasus
Pseudomonas syringae pv.papulans,
 overwintering, Malus 6252.
Pseudomonas syringae pv.phaseolicola,
 halo blight, disease resistance, Phaseolus vulgaris 5406.
 phytotoxins, amino acid composition 1940.
 production, phaseolotoxin, phosphosulfamylornithine 2763.
Pseudomonas syringae pv.savastanoi,
 pathogenicity, Olea europaea, Nerium oleander 4558.
 survival, leaves, Olea europaea, pathology 6253.
Pseudomonas syringae pv.syringae,
 infection, Allium porrum, case reports 7184.
 overwintering, Malus 6252.
 overwintering, Prunus persica 6247.
 Prunus canker, South Africa 274.
 virulence, canker, Prunus persica, Malus, Pyrus 8810.
Pseudomonas syringae pv.tagetis,
 infection, Helianthus tuberosus, chlorosis, leafspot 3849.
Pseudomonas syringae pv.tomato,
 factors affecting survival, speck, Lycopersicon esculentum 276.
 speck, disease resistance genes, inheritance, Lycopersicon 2828.
 speck, disease resistance, plant breeding, cultivars, Lycopersicon esculentum 1179.
 speck, disease resistance screening projects, genetic analysis, Lycopersicon esculentum 5482.
 speck, Lycopersicon esculentum, acid rain 4554.
 speck, phages use detection, Lycopersicon esculentum 8823.
Pseudomonas syringae tabaci,
 wildfire disease resistance, inheritance, plant breeding, callus culture,

Pseudomonas syringae tabaci, (continued)

- Nicotiana tabacum 317.
Pseudomonas syringae var.papulans,
 blister spot, pathology, Malus pumila, Italy 7161.
Pseudomonas syringae var.savastanoi,
 media (selective), methodology 7591.
Pseudomonas syringae var.syringae,
 infection, Prunus dulcis, pathology 7165.
Pseudomonas tolaasii,
 blotch, Agaricus bisporus, pathology, phenotyping 4564.
Pseudomonas viridiflava,
 leaf blight, Lycopersicon esculentum, etiology 4561.
Pseudomonas acid,
 antibacterial activity, Staphylococcus aureus 4727.
 N.M.R., Pseudomonas fluorescens 7457.
 antibacterial activity 6555.
Pseudoperonospora cubensis,
 Cucumis sativus, fungicides, disease control, Solanum tuberosum, Cucumis sativus 2894.
 metalaxyl resistance, strains competition, downy mildew, Cucumis sativus 341.
 metalaxyl, resistance, strains, pathogenicity, Cucumis sativus 4549.
 oospores, downy mildew, incidence, Lagenaria siceraria, Cucurbita moschata, India 8838.
Pseudoperonospora humuli,
 downy mildew, Humulus lupulus, disease control, comparison, disease resistance cultivars, pruning, fungicides, reviews 1170.
Pseudopeziza trifolii,
 leafspot, Trifolium repens 8761.
Pseudoplusia includens,
 biological control, epizootiology, Nomuraea rileyi 5214.
 pathogens, isolation, Entomophthora gammae 6088.
 virulence, temperature, dosage effects on, Anticarsia gemmatilis 5212.
Pseudorabies virus,
 antiviral activity, ammonium-5-tungsto-2-antimonate 6471.
 antiviral activity, 9-(2-hydroxyethoxymethyl)guanine 5476.
 macrolide antibiotics, potentiation, 9-(2-hydroxyethoxymethyl)guanine, antiviral activity 6475.
 nucleocapsids, antigens, use, skin tests, pigs 617.
 photoinactivation, methylene blue, light, electricity 468.
 vaccines, use, preparation, Lens culinaris agglutinins+agarose immobilization, pigs 3182.
Pseudotsuga douglasii,
 inoculum efficacy, immobilized cells, ectomycorrhizas 8163.
Pseudotsuga menziesii,
 callus culture, disease resistance, Phaeolus schweinitzi infection 2826.
 clear cutting, burning, effects on ectomycorrhizas association 7231.
 endomycorrhizas symbiosis, role, drought tolerance, USA 2913.
 fertilizer applications stimulation phosphate nutrient uptake, ectomycorrhizas 5574.
 forests, fungi, biomass, hyphae 1232.
 host specificity, Verticicladiella wagneri, morphology, variants 4613.
 inoculum, Pisolithus tinctorius, spores 5579.
 Laccaria laccata, ectomycorrhizas, aromatic compounds, biological control, root rot, Fusarium oxysporum 5562.
 lignocelluloses, streams, factors affecting, microorganisms, biodegradation 999.
 mycorrhizas, bifentox, chlorothal, napropamide, effects on, development 5582.
 needlecast, Phaeocryptopus gaummanni, effects on harvesting leaves dehydration, retention 3911.
 pathogenicity, Calocera viscosa 5597.
 pathogens, Caloscypha fulgens, dissemination, Mammalia 7237.
 Phellinus weirii infection, growth reduction determination 3923.
 Phytophthora pseudotsugae root rot, etiology, pathogenesis 3909.
 roots biomass, mycorrhizas association 3945.
 roots, Pisolithus tinctorius spores inoculation, seedlings survival 5607.
 seedlings, mycorrhizas growth, forests litter effects on 5546.
 seedlings, silviculture, root rot, Phytophthora, disease control, metalaxyl 8927.
 silviculture, nutrient uptake, nitrogen fixation, actinorrhizas, Alnus rubra, Cytisus scoparius 8159.
 Verticicladiella wagneri black stain, thinning association 3924.
Psidium,
 leaves, in situ effects on Azotobacter 4643.
Psidium guajava,
 post-harvest decay, fruit rot, fungi 8876.
Psilocin,
 isolation, high-performance liquid chromatography, alkaloids, Psilocybe 3751.
Psilocybe,
 alkaloids, baecocystin, psilocin, psilocybin, isolation, high-performance liquid chromatography 3751.
Psilocybin,
 isolation, high-performance liquid chromatography, alkaloids, Psilocybe 3751.
Psophocarpus tetragonolobus,
 flour, nitrogen sources, L-lysine production, Corynebacterium glutamicum, Brevibacterium flavum 7670.
 phylody, mycoplasma-like organisms, leaves lesions, ultrastructure 8773.
Psorophora columbiae,
 biological control, paddy fields, aerial applications, distribution, formulations, Bacillus thuringiensis 6902.
 biological control, paddy fields, Bacillus thuringiensis 5264.
Psychrophilic bacteria,
 gram-negative bacteria, isolation, cold storage, seafood, Melanogrammus aeglefinus 8703.
Psychrophilic microorganisms,
 leaves decomposition 5306.
 yeasts, proteolytic enzymes, lipolysis, food contamination, seafood 5340.
Psychrotrophic bacteria,
 enumeration, automated methods, electrical impedance, milk 5315.
 food contamination, pork 6966.
 packaging, organoleptic evaluation, vacuum packaging, nitrogen packaging, veal 5363.
 proteinase production, milk contamination, nitrogen effects on 7849.
 proteolytic enzymes, dairy products isolates 1057.
 spoilage, temperature, shelf life, poultry, meat products 6972.
 spoilage, vacuum packaging, nitrogen packaging, luncheon meat 8715.

- Psychrotrophic microorganisms**, leaves decomposition 5306.
yeasts, proteolytic enzymes, lipolysis, food contamination, seafood 5340.
- Public health**,
bacteria, indicator species, accumulation, filter feeders, *Gryphaea gasar* 3217.
environmental hygiene, disease control, conferences 1501.
land disposal, wastewater treatment, reviews, bibliographies 4911.
meat, contamination, microbiology, bacteria 4458.
microbial pollution, environmental hygiene, conferences 7642.
Mycobacterium, *Streptococcus*, leachates, waste disposal, landfills 3198.
pathogens, viruses, *Escherichia coli*, sewage sludge, land disposal 2367.
Brucella, *Brucella* virulence carriage, aquaculture, reviews 2386.
risks, viruses microbial pollution, standards, environmental monitoring, reviews, books 2537.
risks, viruses microbial pollution, waste water aerosols irrigation, reviews 2336.
sewage treatment, bacteria, viruses 2363.
solid wastes, disease transmission, Rodentia, Diptera, bacteria, fungi, viruses 2361.
solid wastes disposal, environmental hygiene 2370.
Staphylococcus contamination, dairy products, India 1056.
waste water, survival, rotavirus, reovirus 1459.
water pollution, water analysis, reviews, bibliographies 4946.
- Puccinia**,
rust, *Triticum aestivum* seedlings, linkage analysis 258.
rust, *Triticum*, LANDSAT, monitoring, epidemics, Pakistan 6246.
- Puccinia arachidis**,
rust, *Arachis hypogaea*, leaves phenolic acids levels association 8771.
- Puccinia brachypodii**,
rust, *Poa annua*, India 2036.
- Puccinia canaliculata**,
biological control, *Cyperus esculentus*, characterization 1848.
- Puccinia cardui-pycnocephali**,
rust, biological control, *Carduus tenuiflorus*, *Carduus pycnocephalus* 8025.
- Puccinia carduorum**,
biological control, *Carduus nutans* susceptibility, weed control 6073.
- Puccinia chondrillina**,
biological control, *Chondrilla juncea* weed control 6075.
biological control, life cycle, *Chondrilla juncea* weed control, USA, Washington 6074.
- Puccinia coronata**,
crown rust, β -D-fructofuranosidase physicochemical properties, leaves, *Avena sativa* 2109.
crown rust, disease resistance, *Avena sterilis* 4577.
disease resistance genetic screening, *Avena sativa* 5489.
infection, urediniospores production, cell culture, coleoptile, *Avena sativa* 2791.
leaf rust, *Lolium*, disease resistance, cultivars 3874.
- Puccinia coronata f.sp.avenae**,
crown rust, *Avena sativa*, disease resistance, genetic analysis 3868.
crown rust, pathogenesis, *Avena byzantina* 7982.
- Puccinia graminis**,
races, incidence, geographical distribution, USA, Mexico, isolation, *Avena sativa*, *Triticum aestivum* 1125.
spore germination, lectins effects on 3877.
stem rust, inheritance disease resistance, *Triticum aestivum* 6293.
stem rust, races, virulence, host-pathogen interactions, disease resistance, plant breeding, *Triticum aestivum* 2858.
urediniospores, rust, Gramineae, epidemiology 5417.
- Puccinia graminis f.sp.secalis**,
races, distribution, virulence, *Secale cereale*, North America 265.
rust, disease resistance, plant breeding, *Hordeum vulgare* 8073.
- Puccinia graminis f.sp.tritici**,
infection, host plants cultivars effects on, leaves culture 1991.
rust, disease resistance, brome mosaic virus infection effects on, *Triticum aestivum* 263.
rust, host-pathogen interactions, disease resistance, *Triticum aestivum* 8092.
stem rust, disease resistance, Agropyron elongatum, transfer, recombination, *Triticum aestivum* 314.
stem rust, disease resistance, inheritance, Sr gene, *Triticum aestivum* 315.
stem rust, disease resistance, *Puccinia helianthi* induction, *Triticum aestivum* 293.
stem rust, epidemiology, disease resistance, Austria, *Triticum aestivum* 6244.
stem rust, hypersensitive response, lignin biosynthesis, *Triticum aestivum* 2059.
stem rust, pathogenesis, disease resistance, *Triticum aestivum* genotypes 8885.
stem rust, *Triticum aestivum* seedlings, linkage analysis 258.
stem rust, urediniospores, disease transmission, brome mosaic virus, *Triticum aestivum* 2789.
stem rust, virulence genes, plant breeding, *Triticum aestivum*, books 4239.
urediniospores, brome mosaic virus, disease transmission, stem rust, *Triticum aestivum* 2790.
urediniospores, infectivity analysis, association *Triticum aestivum* stem rust 250.
virulence, genes, association, stem rust, geographical distribution 7972.
- Puccinia helianthi**,
infection, rust association, gene expression, geographical distribution 7922.
induction disease resistance, leaf rust, stem rust, *Triticum aestivum* 293.
plant diseases, *Helianthus tuberosus*, effects on yield 5457.
rust, *Helianthus annuus*, Australia 8014.
- Puccinia hordei**,
brown rust, *Hordeum vulgare*, pathogenesis 5424.
disease resistance, hybridization, Pa3 gene, Pa7 gene, *Hordeum vulgare* 8063.
host range, *Hordeum vulgare* races, disease resistance 1995.
leaf rust, disease resistance breeding, *Hordeum vulgare* 301.
parasitism, *Hordeum spontaneum*, Ornithogalum, characterization 7968.
rust, disease resistance, genes, host-pathogen interactions, models, *Hordeum vulgare* 2860.
urediniospores, aerosols, deposition, methodology, *Hordeum vulgare* 8786.
- Puccinia horiana**,
white rust, *Chrysanthemum*, epidemiology, Australia 2024.
- Puccinia japonica**,
rust, *Anemone flaccida*, life cycle 8011.
- Puccinia melanocephala**,
rust, *Saccharum*, epidemiology, USA 1124.
- Puccinia poaeum**,
infection, *Tussilago farfara*, pathogenesis, carbon dioxide antifungal activity 8130.
- Puccinia polysora**,
rust, disease resistance inheritance, *Zea mays* 8071.
- Puccinia paildii**,
rust disease resistance, *Eucalyptus* 5594.
- Puccinia recondita**,
brown rust, disease resistance, inheritance, *Triticum aestivum* 2836.
disease resistance, *Triticum aestivum*, characterization 4578.
leaf rust, disease control, seed treatments, fungicides, *triticum aestivum* 2904.
leaf rust, disease resistance, *Triticum aestivum*, genetic control 2054.
leaf rust, pathology, *Triticum aestivum* 7961.
leaf rust, *Triticum aestivum* seedlings, linkage analysis 258.
rust, incidence, *Triticum* \times *Secale cereale* leaves, stomata size distribution 7955.
rust, *Vicia faba*, triadimefon effects on ultrastructure 8131.
stem rust, races, virulence, host-pathogen interactions, disease resistance, plant breeding, *Triticum aestivum* 2858.
urediniospores, rust, Gramineae, epidemiology 5417.
- Puccinia recondita f.sp.secalis**,
leaf rust, disease resistance, inheritance, plant breeding, *Secale cereale* 8907.
- Puccinia recondita f.sp.tritici**,
disease resistance, *Triticum* 1197.
factors affecting, *triticum aestivum*, disease resistance 3957.
leaf rust, disease resistance, inheritance, plant breeding, *Secale cereale* 8907.
leaf rust, disease resistance, Lr 13 gene, genetic control, *Triticum aestivum* 8069.
leaf rust, disease resistance, *Puccinia helianthi* induction, *Triticum aestivum* 293.
leaf rust, urediniospores, disease transmission, brome mosaic virus, *Triticum aestivum* 2789.
- Puccinia sorghi**,
leaf rust, effects on carboxylate translocation, *Zea mays* 259.
virulence, rust, *Zea mays* 5423.
- Puccinia striiformis**,
stripe rust, disease control, seed treatments, fungicides, *triticum aestivum* 2904.
stripe rust disease resistance, gene transfer, plant breeding, *Triticum dicoccoides* \times *Triticum durum*, *Triticum aestivum* 3860.
stripe rust, disease resistance, genes, chromosomes location, *Triticum aestivum* 2834.
stripe rust disease resistance, inheritance, growth stage, vegetative cells, *Triticum* hybrids 2886.
stripe rust disease resistance, inheritance, plant breeding, *Triticum* 5476.
stripe rust, *Triticum aestivum* seedlings, linkage analysis 258.
stripe rust, *Triticum aestivum*, USA, Pacific Northwest, models 252.
yellow rust, *Triticum aestivum*, pathogenesis 4515.
- Puccinia triticea**,
brown rust disease resistance, *Triticum aestivum* 5486.
- Pulicoidae**,
pest control, *Bacillus thuringiensis* subsp.berliner, β -exotoxin clays formulations 4398.
- Pullulan**,
biosynthesis optimization, Aureobasidium pullulans, peat hydrolysates media 6055.
biosynthesis, *Pullularia pullulans* 947.
- Pullulanes**,
Klebsiella aerogenes, immobilized enzymes, starch processing 111.
production, yeasts 8546.
- Pullularia pullulans**,
pullulan biosynthesis 947.
- Pulp**,
Agave fourcroydes, use production, polygalacturonase, pectinolytic enzymes, *Aspergillus niger* 5189.
- Pulp mills**,
effluents, biodegradation, bacteria 1467.
industrial effluents, biodegradation, digestion (anaerobic), toxicity, wastewater treatment, methanogenic bacteria 6669.
industrial effluents, digestion (anaerobic), Clostridium butyricum 3204.
industrial effluents, wastewater treatment, lagoons, mutagenicity industrial effluents 4903.
industrial effluents, wastewater treatment, rotating discs, fungi 2341.
industrial effluents, 12-chlorodehydroabietic acid, detoxification, *Mortierella isabellina* 2706.
lignin hydrolysis, enzymes, fungi 49.
use, biotechnology, wastewater treatment, production, reviews 8397.
waste water, industrial effluents, lignin, fungi, coastal waters 1455.
wood, carbohydrates fermentation, solvents production, Clostridium 5259.
- Pulse radiolysis**,
flavodoxin, viologen reduction, *Megasphaera elsdenii* 858.
- Punica granatum**,
fruits, *Beltraniella humicola* spot, new records 2002.
Fusarium fusarioides leafspot, new records 2004.
- Pupae**,
biological control, pest control, *Beauveria bassiana*, inoculum survival, soil, pupae 5213.
- Purines**,
analogs, synthesis, antiviral activity 4032.
structure, antiviral activity 8329.
- Purple blotch**,
Allium cepa, *Alternaria porri* nutrient requirements 2037.
Alternaria porri, factors affecting, pathogenesis, *Allium cepa* 8839.
- Purple membranes**,
bacteriorhodopsin pigments, C.D., *Halobacterium halobium* 4257.
- Putidamonoxin**,
active sites, 4-methoxybenzoate monooxygenase (O-demethylating), *Mossbauer* spectroscopy, *Pseudomonas putida* 5176.
- Putidaredoxin**,
amino acid sequence, *Pseudomonas putida* 6000.
- Putrescine**,
marine bacteria, biodegradation, sea water, media (culture) 3676.
- Pycnoporus cinnabarinus**,
biodegradation, lignocelluloses, cotton, ginning, industrial wastes, textile industry 6184.
 α -D-galactosidase, purification, characterization 7694.
- Pyraanthra**,
host plants, fireblight, reviews 7166.
- Pyranil tartrate**,
+tylosin, +lincomycin, feeds, prophylaxis, treatment, *Treponema hyodysenteriae*,

Subject Index

- Pyrantel tartrate, (continued)**
dysentery, pigs 1918.
- Pyrazinamide,**
Mycobacterium tuberculosis susceptibility, methodology 1320.
- Pyrazinamide,**
nifampin, antibacterial activity, Mycobacterium, nephelometry 7354.
- Pyrazine carboxylase,**
activity, screening, identification, Corynebacterium diphtheriae 5909.
- Pyrazofurin,**
antiviral activity, RNA viruses 4020.
- 6-Pyrazolo benzoxazoles,**
antibacterial activity, microorganisms, characterization 8340.
- Pyrazolo-[3,4-c]-pyrazole hemizadibocaryanine,**
antimicrobial activity 7393.
- Pyrazolo[3,4-d]pyrimidine-4(5H)-seione nucleosides,**
antiviral activity, measles virus, herpes simplex virus 2 9119.
- Pyrazolo[4,3-d]pyrimidine nucleosides,**
formycin B analogs, antiviral activity 9118.
- Pyrenophora teres,**
infection, Hordeum vulgare, factors affecting pathogenesis 7946.
- Pyrenochaeta lycopersici,**
isolation, identification, Lycopersicon esculentum roots brown rot 7176.
sporulation induction methodology 1673.
- Pyrenopeziza brassicae,**
spores, dispersal, rainfall, plant diseases 1109.
- Pyrenophora teres,**
cytopathogenicity, net blotch, Hordeum vulgare 1982.
net blotch, barley yellow dwarf virus effects on disease resistance, Hordeum vulgare 1196.
- Pyranophora trichostoma,**
plant diseases, incidence, Elymus junceus 1134.
- Pyricularia oryzae,**
antibiotics production, morphology association 2255.
antifungal activity, diaryl methylphosphonates, structure-activity relationships 3585.
antifungal activity, oxytetracycline, streptomycin, blast, disease control, Oryza sativa 7215.
blast disease resistance, inheritance, Oryza sativa 5493.
blast disease resistance, Oryza sativa 1128.
blast, disease resistance, polygenic inheritance, Oryza sativa 6297.
blast, RNA, DNA, levels, leaves, Oryza sativa 7978.
blast, susceptibility, night temperature effects on, seedlings, Oryza Sativa 7958.
disease resistance plant breeding, Oryza sativa 8896.
isoprothiolane inhibition appressoria penetration, blast, Oryza sativa 2892.
pathogenicity, energy role, Oryza sativa varieties 1132.
spore germination, conidia, inhibition, caffeic acid, superoxide, free radicals, root disease resistance, plant diseases 8889.
tricyazole inhibition appressoria penetration, cell walls, Oryza sativa 2092.
- Pyridine-2-azo-p-dimethylaniline cephalosporin,**
antibacterial activity, p-lactamase indicators, gram-negative bacteria, clinical microbiology 501.
- Pyridines,**
solubility, biodegradability, microorganisms 6158.
- Pyridoxal-5-phosphate,**
aromatic-L-amino-acid decarboxylase requirements, Micrococcus peritremus 1817.
inactivation leucine dehydrogenase, substrate specificity, kinetics, Bacillus sphaericus 5149.
- Pyridoxine,**
bioassays, Saccharomyces carlsbergensis 813.
- Pyrimidine nucleosides,**
analogs, antiviral activity, herpes simplex virus 1 7391.
- Pyrite,**
iron(III) oxidation, mining, iron-oxidizing bacteria 5689.
cationation, man release, role adsorption, thiobacillus ferrooxidans 5691.
- Pyrogens,**
tests, Escherichia coli lipopolysaccharides, association heat treatments 227.
- Pyrolysis,**
chromatography, Enterobacteriaceae identification 9324.
- Pyrolysis products,**
gas chromatography, strains identification, Metarhizium anisopliae 4227.
mass spectroscopy, identification, Bacillus 5052.
- Pyrolonitrin,**
analogs, synthesis 3169.
analogs, synthesis, antibacterial activity 3171.
derivatives, biosynthesis, Pseudomonas aureofaciens 3139.
- Pyrolomycin C,**
physicochemical properties, biological properties, Actinosporangium vitaminophilum 2285.
structure, Actinosporangium 2287.
- Pyrolomycin D,**
physicochemical properties, biological properties, Actinosporangium vitaminophilum 2285.
structure, Actinosporangium 2287.
- Pyrolomycin E,**
physicochemical properties, biological properties, Actinosporangium vitaminophilum 2285.
structure, Actinosporangium 2287.
- Pyrolomycin F,**
Actinosporangium vitaminophilum, derivatives, biosynthesis, bromide media, antibacterial activity, antifungal activity 2295.
- Pyroloquinoline quinone,**
production, methylotrophic bacteria 4347.
- Pyrus,**
canker, virulence, Pseudomonas syringae virulence, Prunus persica, Malus, pv. syringae 8810.
host plants, fireblight, reviews 7166.
- Pyrus amygdaliformis,**
Pyrus communis, disease resistance, Venturia pyrina scab, Mycosphaerella sentina leafspot 8080.
- Pyrus communis,**
cultivars, plant breeding, disease resistance, fireblight, Erwinia amylovora 8062.
Erwinia amylovora fire blight, conferences 5947.
Erwinia amylovora fire blight, disease control 5443.
Erwinia amylovora fire blight, disease transmission, vectors, Apis 5442.
Erwinia amylovora fire blight, epidemiology 5444.
- Pyrus communis, (continued)**
Erwinia amylovora fire blight, legislation, disease control 5463.
fire blight, Erwinia amylovora, epidemiology, detection 5462.
Pyrus amygdaliformis, disease resistance, Venturia pyrina scab, Mycosphaerella sentina leafspot 8080.
- Pyrus pyrifolia,**
dieback, canker, Botryodiplodia theobromae, pathology 8807.
- Pyruvate carboxylase,**
acyl-CoA activation, aspartic acid inhibition, yeasts 889.
purification, characterization, Thiobacillus novellus 6847.
- Pyruvate decarboxylase,**
catalysis, pyruvic acid, acetaldehyde, acetoin by-products, chromatography use, Saccharomyces cerevisiae 7721.
- Pyruvate dehydrogenase (lipomide),**
complex, domains structure, N.M.R., Bacillus stearothermophilus 3462.
dihydrolipomide acetyltransferase acetyltransferase dehydrogenase complex activity, histidine residues role, p-(bromocetyl)-amino phenyl arsenoxide inhibition, Escherichia coli 3522.
- active sites activity, bromopyruvic acid inhibition, Escherichia coli 2623.
- Pyruvate kinase,**
deficient mutant, aspartic acid production, Brevibacterium flavum 7661.
deficient mutant, lysine production, Brevibacterium flavum 8527.
lysine production, Brevibacterium flavum 1728.
- Pyruvate oxidase,**
Lactobacillus plantarum, purification, characterization 8584.
- Pyruvic acid,**
deficient mutant, Clostridium saccharolyticum, ethanol production 152.
effects on Salmonella recovery, feeds, media (enrichment) 3322.
lactate dehydrogenase reduction, kinetics, Phycomyces blakesleeanus 2620.
pyruvate decarboxylase catalysis, acetaldehyde, acetoin by-products, chromatography use, Saccharomyces cerevisiae 7721.
- Pythiaceae,**
mizosphere, Lycopersicon esculentum, Oryza sativa, Triticum vulgare, Pisum sativum 8220.
- Pythium,**
antagonism, rhizosphere actinomycetes, Eucalyptus marginata, Pinus radiata 2095.
damping-off, blight, disease control, agricultural practices comparison fungicides, Phaseolus vulgaris 1210.
damping-off, disease resistance, Philippines, Nicotiana tabacum 7179.
damping-off, Eucalyptus, incidence, greenhouse 8942.
damping-off, Pinus banksiana, Picea mariana, soil amendment, organic matter, effects on 1239.
dieback, fungicides, disease control, Daucus carota 8116.
etiology, Phaseolus vulgaris root rot, USA, Wisconsin 7939.
interaction, ectomycorrhizas, reviews 353.
isolation, media (selective), soil, Saccharum officinale roots 1993.
microwave radiation soil effects on 3361.
oospores, spore germination, viability, tetrazolium bromide staining 805.
Phaseolus vulgaris root rot, effects on N-(phosphonomethyl)glycine activity 7943.
pod rot, Arachis hypogaea, calcium levels effects on pathogenesis 1121.
root rot, soils (sandy), Zea mays 1986.
root rot, Trifolium subterraneum, disease control, soil pasteurization 6301.
roots necrosis, Crononema xenoplas disease control, dibromochloropropane effects on, orchards, Prunus persica 7164.
seed rot, Pisum sativum, biological control, use, Trichoderma 2779.
soil-borne diseases, biological control, antagonism, ectomycorrhizas, Fagus 5513.
Trichoderma, antagonism, soil, biological control 8115.
- Pythium aphanidermatum,**
antifungal activity, diaryl methylphosphonates, structure-activity relationships 3885.
blight, disease control, metalaxyl, propamocarb, efosite-AI, Agrostis 8134.
damping-off, Lycopersicon esculentum, disease control, benomyl, demosan, captan 1228.
disease reservoirs, soil-borne diseases, baiting substrates, seeds, Cucumis sativus 8763.
plant diseases, biological control, Trichoderma harzianum 4589.
root rot, benomyl, PCNB, Ficus benjamina 8916.
Thiophene derivatives antifungal activity, photoinduction 3060.
- Pythium aristatum,**
etiology, Phaseolus vulgaris root rot, USA, Wisconsin 7939.
- Pythium blutleri,**
damping-off, Vigna unguiculata, fungicides disease control, herbicides soil oil applications effects on 2090.
- Pythium catenulatum,**
etiology, Phaseolus vulgaris root rot, USA, Wisconsin 7939.
- Pythium debaryanum,**
infection, disease resistance, role, symptomless infection, Gibberella zeae, Nigrospora oryzae, Zea mays seeds 8792.
- Pythium disotocum,**
etiology, Phaseolus vulgaris root rot, USA, Wisconsin 7939.
- Pythium irregulare,**
damping-off, disease control, seed treatments, Brassica 8141.
- Pythium myriotylum,**
root rot, disease control, gibberellins, foliar application, Arachis hypogaea 322.
root rot, etiology, pathogenesis, Xanthosoma sagittifolium 8844.
- Pythium oligandrum,**
biological control, damping-off, Beta vulgaris 8111.
biological control, hyperparasitism, Rhizoctonia solani 2079.
biological control, Pythium ultimum damping-off, Lepidium sativum seeds 974.
- Pythium ultimum,**
crop residues, Hordeum vulgare, Medicago sativa, smoke, antifungal activity 8319.
damping-off, biological control, Agrobacterium radiobacter polysaccharides, seed treatments, Beta vulgaris 2891.
damping-off, biological control, Agrobacterium radiobacter, extracellular polymers, polysaccharides, seed treatments, Lycopersicon esculentum 6309.
damping-off, biological control, use, pyoluteorin, biosynthesis, Pseudomonas fluorescens 2888.
damping-off, disease control, seed treatments, Brassica 8141.
damping-off, Lepidium sativum seeds, biological control, Pythium oligandrum 974.
damping-off, Medicago sativa seedlings, greenhouses, USA, California 1115.
damping-off, Pisum sativum, disease control, use, Trichoderma viride + fungicides 338.
damping-off, seed rot, biological control, Penicillium oxalicum, seed treatments, Cicer anethum 8114.

Pythium ultimum, (continued)

decline, disease control, ofosite-Al, metalaxyl, mancozeb, Vitis vinifera 8122.
nontarget organisms, toxicity, synergism, atrazine, permethrin 459.
pathogens, Rhizobium japonicum growth, Glycine max, pesticides effects on 1212.
root rot, Beta vulgaris, Lactisaria arvalis biological control 323.
spore germination, rhizosphere, Gossypium hirsutum 1148.
survival, soil, environmental effects 3928.

Quail,

embryos, cell culture, Sephadex carriers, propagation, mumps virus 7562.

Quality control,

agar diffusion test, ampicillin + sulbactam antibacterial activity 4834.
agar diffusion test, antimicrobial agents susceptibility 1379.
agar diffusion test, bacteria 4037.
antibiotic sensitivity testing, clinical microbiology 4688.
antibiotic sensitivity testing, clinical microbiology laboratories, Norway 4040.
association, potency, disc-diffusion test, antibiotic sensitivity testing 7421.
blood culture, microorganisms contamination 4036.
cephalothin antibiotic sensitivity testing 4828.
clinical microbiology 1371.
cosmetics production, environmental hygiene 8426.
disc-diffusion test, antibiotic sensitivity testing 8348.
disc-diffusion test, antibiotic sensitivity testing, ampicillin 7439.
disc-diffusion test, Pseudomonas aeruginosa azlocillin antibacterial activity 2262.
gentamicin, antibiotic sensitivity testing, mathematical models, Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa 1400.
hepatitis B virus vaccines 6651.
hepatitis B virus vaccines, immunogenicity 6600.
microorganisms contamination, pharmaceuticals industries 9147.
milk processing, hygiene 7001.
Mycobacterium laboratories 3072.
Neisseria gonorrhoeae isolation, identification, USA 3075.
netilmicin disc-diffusion test 3073.
netilmicin disc-diffusion test, bacteria 3047.
pharmaceuticals, microorganisms, contamination, production, books 9343.
pharmaceuticals, reviews 9150.
reagents, use, identification, Enterobacteriaceae 1370.
steam sterilization, efficacy, Bacillus stearothermophilus indicator species 476.
sterilization, pharmaceuticals 9146.
Vibrio isolation, media (isolation), statistical analysis 1622.
yogurt production, books 5097.

Quarantine,

disease control, disease spread, plant diseases 1193.
introduced species, phytopathogenic fungi spores, New Zealand 6329.

Quaternary alkylammonium compounds,

biodegradation, industrial wastes, Pseudomonas 1017.

Quaternary ammonium compounds,

alkylthiomethyl-isocholinium chloride, antimicrobial activity, spores, fungi, bacteria 9135.

antifungal activity, antibacterial activity 9132.

disinfection 1513.

inhibition, proteolytic enzymes, Bacillus subtilis 4957.

surfactants, biodegradation, freshwater microorganisms 5311.

Quercus,

ectomycorrhizas, nitrogen fertilizers effects on 3941.

pathogenicity, hypoxylon atrocinetum 5593.

Pisolithus tinctorius inoculation, methodology, reviews 831.

powdery mildew, Erysiphe, epidemiology, spectrophotometry 7917.

wilt, Ceratocystis fagacearum, aerial photography surveys, USA, Texas 8189.

wilt, Ceratocystis fagacearum, epidemiology, USA, West Virginia 1236.

wild, storage conditions, survival, wilt, Ceratocystis fagacearum 8956.

Quercus alba,

cellulose, lignin, Xylobolus frustulatus, biodegradation 3674.

defoliation, ethanol levels, association colonization, dieback, Armillaria mellea 5586.

Quercus borealis,

live roots, biodegradation, soil microorganisms 6322.

Quercus ilex,

polyphenols biosynthesis, relationship, Microsphepha alphitoides infection 2825.

Quercus imbricaria,

seedlings, ectomycorrhizas, ectomycorrhizas 5564.

Quercus laevis,

wilt, Ceratocystis fagacearum, pathogenesis, USA, South Carolina 2115.

Quercus petraea,

forests, litter fall decomposition, British Isles 352.

plantations, inoculation, ectomycorrhizas 7220.

Quercus robur,

branches, fungal flora 7218.

defense mechanism, suberin characterization, disease resistance, Stereum gausapatum 7235.

fungal flora 5609.

plantations, inoculation, ectomycorrhizas 7220.

Quercus rubra,

cellulose, lignin, Xylobolus frustulatus, biodegradation 3674.

seedlings, Pisolithus tinctorius inoculation, nutrient uptake, phosphorus, nitrate 9345.

Quercus velutina,

defoliation, ethanol levels, association colonization, dieback, Armillaria mellea 5586.

Quinacillin sulfone,

β -lactamase inhibitors, gram-negative bacteria 9161.

Quinolofur,

antibacterial activity, Staphylococcus, Streptococcus, cow's milk, correlation, mastitis, disease control, cattle 5773.

Quinolazone-4,

derivatives, antifungal activity 320.

Quinolone,

biodegradation, kinetics, nitrogen sources, Pseudomonas aeruginosa 6951.

Quinolones,

derivatives, enoxacin, antibacterial activity, Enterobacteriaceae 6448.

Quinolones,

antibacterial activity 9091.

antibacterial activity, Legionella 5729.

Quinolones, (continued)

derivatives, antibiotic sensitivity testing, Enterobacteriaceae, clinical isolates 4726.

Quinoxaline-carboxylic acid,

analogs, effects on fermentation, echinomycin derivatives biosynthesis, Streptomyces echinatus 5799.

Quintozene,

antifungal activity, sensitivity, isolates variability, Rhizoctonia solani 8117.
pesticide resistance, Sclerotium cepivorum 5529.

Rabbits,

animal models, meningitis, Escherichia coli, Listeria monocytogenes, antibacterial activity, mezlocillin 4884.

animal models, Streptococcus faecalis endocarditis, antibacterial activity, gentamicin, \pm mezlocillin, \pm ampicillin 4838.

antibody response, influenza virus hemagglutinins genes, vaccinia virus transfection 4867.

antiseria, Pseudomonas cepacia serotyping methodology 1636.

rabies virus antibodies determination, counter immunoelectrophoresis correlation, fluorescent antibody test 3250.

Salmonella minnesota immunoglobulin G, enzyme-linked immunosorbent assay 2459.
syphilis, immunoglobulin M detection, enzyme-linked immunosorbent assay methodology, Treponema phagedenis flagella 765.

Rabies virus,

antibodies determination, counter immunoelectrophoresis correlation, fluorescent antibody test, rabbits 3250.

antigens, immunoelectron microscopy, localization, central nervous system, embedding, methodology 4999.

antiviral activity, tungstosulfonamide derivatives, virazole, adenosine derivatives 4765.

glycoproteins antigenic determinants localization, vaccines production 6632.

glycoproteins, gene expression, Escherichia coli, genetic engineering, vaccines production 6621.

membranes glycoproteins, incorporation, lysosomes, vaccines, antibody response, mice 6660.

pathogenicity, antigenicity, immunogenicity, association vaccines 1451.

strains, immunogenicity, vaccines production, Vulpes vulpes 6629.

vaccines development 4894.

vaccines, new records, clinical trials, man 9221.

Racemization,

L-aspartic acid oxidation, β -lactam antibiotics synthesis 9205.

bacteria enzymes, synthesis, L-lysine, L-cysteine 4.

Racemomycin,

antibiotic resistance, genes, cloning, Streptomyces 1314.

Rachidiusa nu,

biological control, pathogens, nuclear polyhedrosis virus 2659.

Rachiplusia ou,

biological control, pathogens, nuclear polyhedrosis virus 2659.

Radiation,

antibiotics sterilization 1378.

+ chemicals pretreatment, crop residues, effects on enzymes hydrolysis 1044.

Clostridium botulinum spores, effects on 4468.

disinfection, bacteria, fishery products, feeds 5359.

disinfection, sewage sludge 551.

effects on, antimicrobial activity, antimicrobial agents 1359.

effects on Clostridium botulinum toxins production, bacon contamination 7039.

polymerization, glucose isomerase activity, immobilization, Streptomyces phaeochromogenes 5178.

polymerization, immobilized cells, antibodies adsorption, Escherichia coli 5896.

polymerization, immobilized cells, cellulase hydrolysis, sawdust, Trichoderma reesei 6949.

polymerization, neutral proteinase, immobilization, thermal stability, activity 1759.

polymerization, Streptomyces phaeochromogenes immobilization, glucosylphosphate isomerase activity 6027.

radioresistance, bacteria, dying, effects on 4718.

Radiation,

corn, ethanol production, yeasts, effects on 151.

disinfection, sewage sludge, coliforms, Pseudomonas, Bacillus 5823.

effects on Vigna unguiculata Rhizobium, soils (acid) 2951.

Escherichia coli injuries, antibiotics sensitivity, cell surface hydrophobicity 2241.

inactivation, viruses, manure, pigs 4087.

lignocelluloses hydrolysis susceptibility, effects on 3654.

prevention spoilage, microorganisms, silage, zea mays 6202.

treatment, bacteria survival, food contamination 7031.

treatment, humic acid biodegradation, activated sludge, leachates 1489.

use. preservation. Aaarcus bisporus, characterization 8716.

Radiolimmunoassay,

afatoxin B1, polyethylene glycol, separation techniques, ligands 7099.

association Bacillus anthracis, use, radioactive labelling Staphylococcus aureus protein A 8480.

Clostridium tetani antibodies detection 1610.

comparison, enzyme-linked immunosorbent assay, detection, Haemophilus influenzae antibodies 2515.

comparison, enzyme-linked immunosorbent assay, sensitivity, specificity, hepatitis B surface antigen 7588.

comparison, fluorescence polarization immunoassays, serum levels, vancomycin, man 3116.

comparison, immunodiffusion, bovine leukemia virus antibodies detection 3256.

coronavirus antibodies detection, enzyme-linked immunosorbent assay comparison 2430.

detection, antigens, antibodies, arenavirus 8455.

detection, Escherichia coli, Vibrio cholerae, enterotoxins, production 3272.

detection, hepatitis B surface antigen, blood donors 1546.

detection immunoglobulin M, Japanese encephalitis virus, serum, immunodiagnosis 593.

detection, Japanese encephalitis virus antibodies, cerebrospinal fluid, man 615.

diagnosis, hepatitis B virus, infection, man 640.

hepatitis B surface antigen 4983.

Radiolimmunoassay, (continued)

- identification, *Bacillus anthracis* spores, methodology 677.
 methodology, identification, blood transfusion, disease transmission, hepatitis B, non-A, non-B hepatitis, acquired immune deficiency syndrome, man 646.
 methodology, influenza A virus diagnosis, man 4160.
 methodology, measurement, hepatitis B core antigen, antibodies, association, immunoglobulin M 7565.
 methodology, *Neisseria gonorrhoeae* antibodies detection, man 1586.
 methodology, varicella-zoster virus immunoglobulin G 5009.
 methodology, 2,6-diamino-9-(2-hydroxyethoxymethyl)purine antiviral agents 2435.
 monoclonal antibodies, immunodiagnosis, tuberculosis, man 3351.
 ribavirin 461.
 rotavirus (human) 3243.
 serum antenarv antibodies, detection 8448.
 serum levels, immunoglobulin M, serum levels, antibody response, BK virus, methodology 9279.
 solid phase methods, hepatitis B virus infection, 8 antigen detection, man 8454.
 solid phase methods, woodchuck hepatitis virus 597.
Staphylococcus aureus enterotoxin A, food 1942.
Staphylococcus aureus protein A, enkephalin 1606.
 viruses antigens 6747.
- Radiolimmunosorbent test,**
 hepatitis B surface antigen 604.
- Radiometry,**
 antibiotic sensitivity testing, amphotericin B, fungi 2280.
 drug sensitivity testing, *Mycobacterium tuberculosis* 3051.
 methodology, *Mycobacterium recovery*, respiratory tract, man 1660.
- Radiosensitivity,**
Bacillus megaterium spores, oxygen levels effects on superoxide dismutase 4743.
- Railway tracks,**
 association, oil, stimulation, biodegradation, field trials, fungi, bacteria 1305.
- Rain,**
 fecal coliforms release, cattle feces, water quality 4941.
- Rain forests,**
 succession, nitrogen cycle, Costa Rica 4612.
 tropical environment, litter decomposition, soil microorganisms 7224.
 tropical environment, litter decomposition, soil microorganisms 7226.
 tropical environment, mycorrhizas, nutrient cycles 7225.
 tropical environment, organic matter decomposition, fungi 2911.
- Rainfall,**
 effect on *Ananas* cosmos infection pathogenesis, *Fusarium moniliforme* var. *subglutinans* 8834.
 pesticide applications association, disease control, plant diseases, phytopathogenic fungi, glycine max 1220.
 plant diseases, spores dispersal, *Pseudocercospora herpotrichoides*, *Pyrenopeziza brassicae* 1109.
Pseudocercospora herpotrichoides, spores dispersal, eyespot, straw, *Triticum aestivum* 1997.
- Rangelands,**
 screening, indigenous species, introduced species, forbs, shrubs, *Leguminosae* 7271.
- Rapeseed,**
 meals, glucosinol, goitren, biodegradation, *Bacillus cereus*, *Trichosporon cutaneum* 1042.
- Rapessed oil,**
 use, fungi single-cell protein production 872.
- Raphanus raphanistrum,**
 tobacco streak virus isolation, characterization, host range 4565.
- Raphanus sativus,**
 clubroot, *Plasmodiophora brassicae*, inhibition, inoculation, rhizoplane microorganisms, bacteria 8867.
 damping-off, *Rhizoctonia solani*, fungi, composts 290.
 damping-off, *Rhizoctonia solani*, pathogenicity 282.
 growth, *Trichoderma harzianum*, enhancement, controlled conditions, association, experimental methods 8228.
 mosaic disease, turnip mosaic virus, pathology 8860.
 stunt *Spiroplasma* transmission, *Euscelidius variegatus* vectors 8030.
 white rust, downy mildew, disease control, mancozeb 2902.
- Raphidopalpa fevilcolle,**
 vectors, disease transmission, cucumber green mottle mosaic virus, *Lagenaria sceraria*, *Cucurbita pepo* 8850.
- Rapid plasma reagin test,**
 screening, syphilis, man 2453.
- Ratoon stunt,**
 cornmeles, *Saccharum officinale*, characterization 3810.
Saccharum officinale, *Clavibacter* gen. nov. isolates, characterization 6240.
- Rauscher leukemia virus,**
 poly(A) antiviral activity 4760.
- Reavidomycin,**
 antibacterial activity, macromolecules biosynthesis, *Bacillus subtilis* 4864.
 derivatives synthesis, structure-activity relationship 1417.
 derivatives synthesis, structure-activity relationship 3114.
- Reaction centers,**
 purification, characterization, cell membranes, *Chlorobium limicola* 130.
Rhodospirillum rubrum photosynthesis, preparation methodology 2509.
- Reactors,**
 activated sludge, cutting fluids biodegradation, bacteria identification 178.
 anaerobic conditions, methanogenesis films, ultrastructure 6397.
 cellulose hydrolysis, cellulase, *Trichoderma*, *Geotrichum candidum* 7736.
 continuous culture, denitrifying bacteria population levels, organic compounds, nitrite, nitrate, effects on 860.
 design, digestion (anaerobic), methanogenesis, animal wastes, methane use 5699.
 design, digestion (anaerobic), methanogenesis, surveys, Europe, books 7639.
 design, methanogenesis, manure, digestion (anaerobic) 5824.
 digestion (anaerobic), cheese whey, methane production 3197.
 digestion (anaerobic), methanogenesis, mathematical models, animal wastes, chickens 8394.
 glucose fermentation, lactic acid production, *Lactobacillus delbrueckii* 864.
 sucrose fermentation, ethanol production, *Zymomonas* 153.
 supports, aeration, nitrification, modeling, wastewater treatment 670.
 wastewater treatment, nitrification, ammonification 2354.
- Reagents,**
 indole test, identification, gram-negative bacilli 707.

RecBC protein,

reconstitution, deoxyribonuclease, *Escherichia coli* 1775.

Receptors,

hepatitis B surface antigen, albumin polymers, role liver organotropism, use vaccines production, man, Pan troglodytes 7481.

Recombinants,

Clotidium paraputricum, screening, α -N-acetylgalactosaminidase detection, color, agar 1755.
 DNA, biotechnology, industries, books 3367.
 genetic engineering, vaccines production, hepatitis B virus 6608.
 genetic engineering, vaccines production, picornavirus 6635.
 genetic engineering, vaccines production, poxvirus 6633.
 genetic engineering, vaccines production, vaccinia virus 6638.
 herpes simplex virus, detection, infected cells DNA 5006.
 influenza A virus vaccines, genetic analysis 5808.
 live vaccines production, vaccinia virus 6596.
 vaccines production, pathogenicity, influenza virus 6606.
 vaccines production, rotavirus 6599.

Recreation sites,

sewage treatment, composting, USA, Vermont 4922.
 water, fecal coliforms, membrane filtration, detection 8418.

Red clover vein mosaic virus,

enzyme-linked immunosorbent assay detection 7927.

Red core,

Phytophthora fragariae, vesicular-arbuscular mycorrhizas protection, *Fragaria vesca* 5448.

Red rust,

Cephaeleuros virescens, *Camellia sinensis* 2019.

Red stele,

Phytophthora fragariae, disease control, use, fumigation, comparison, fungicides drenches, *Fragaria* 1182.

Redox properties,

cytochrome c3 structure-activity relationships, *Desulfovibrio* 5108.
 methanogenesis 5695.

Reducing agents,

media (culture), *Azospirillum* 4175.
 titanium citrate, media (culture), enumeration, inhibition, growth, anaerobic bacteria, rumen 9301.

Reduction,

cytohexone, *Clotidium* growth 1881.
 dithiothreitol, sarcosine oxidase, kinetics, *Corynebacterium* 6842.
 manganese, valency, bacteria, soil 6386.
 nitrous oxide, inhibition, association, bioaccumulation, oxygen, *Pseudomonas* 2157.

Refrigeration,

bacteria spoilage, shelf life predictions, milk 6174.
 beef, *Salmonella* survival, antibiotic resistance 7005.
 meat, bacteria, spoilage 3712.
 milk, heating, cornefomes identification 6998.
 milk, pasteurization, shelf life, proteolytic enzymes, bacteria spoilage 6175.

Rehydration,

solutions, *Escherichia coli*, contamination, characterization 4967.

Relative humidity,

Cladosporium carphophilum, conidia release, disease spread, scab 272.
 effects on conidia pathogenicity, replication, *Beauveria bassiana*, biological control, *Blissus leucopertus* 7766.
 effects on post-harvest decay, fungal flora, corn, rice 2051.
 effects on *Stullius luteus* fruit bodies formation, plantations, *Pinus radiata* 5571.

Erysiphe graminis f.sp. hordei,

plant diseases, host-pathogen interactions, effects on 1962.

role, pathogenesis,

leafspot, *Septoria vignicola*, *Vigna sinensis* 8779.

Remote sensing,

disease spread, plant diseases 236.

plant diseases,

yield reduction, plant diseases, mathematical models, world 261.

Renaturation,

phosphatase, electrophoresis, *Acholeplasma laidlawii* 7707.

Renibacterium salmoninarum,

kidney diseases, bacterins vaccines, *Salmo gairdneri* 6682.

Renin,

proteolysis, cheese, *Mucor pusillus*, *Mucor miehe*, *Endothia parasitica* 2741.
 proteolytic enzymes, production, *Basidiomycetes* 6829.

Reovirus,

hemagglutinins, attenuation, antigenicity, vaccines production 6627.
 removal, inactivation, sand filtration methodology, drinking water 9253.
 serotypes, proteins antigenic determinants, vaccines production 6813.
 survival, waste water, public health 1459.
 ultrafiltration isolation, water reclamation 2396.
 water pollution, rivers, Japan 8423.

Reovirus (avian),

cell culture, mammalian cells, comparison, Aves cells 5001.

Reovirus 1,

analogs antiviral activity 4772.

Repeated sequence,

ribosomal protein S1, role, translation, poly(U), poly(A), *Escherichia coli* 4258.

Repellents,

Phenacophthalides felis, efficacy, *Saccharomyces carlsbergensis*, dogs 6092.

Replication,

cytomegalovirus (human), antiviral activity, 9-(1,3-dihydroxy-2-propoxymethyl)guanine: interferon 9115.
 cytomegalovirus (human), inhibition, D,L- α -difluoromethylornithine antiviral activity 4762.
 cytomegalovirus (human), nucleosides, analogs, effects on 4022.
 Epstein-Barr virus, inhibition, 9-(1,3-dihydroxy-2-propoxymethyl)guanine antiviral activity 4761.
 influenza A virus, α -interferon + rimantidine hydrochloride + ribavirin, inhibition 3066.
 influenza A virus, antiviral activity, cymecymycin 9112.
 phage 646 (MLB), dairy starters, Cheddar cheese production, *Streptococcus lactis* 866.
 plant viruses RNA, replication actinomycin D sensitivity, *Vigna unguiculata* leaves infection 7931.
 poliovirus, vesicular stomatitis virus, 6-diazo-5-oxo-L-norleucine, 2-deoxy-D-glucose, effects on 9127.
 poliovirus 1, encephalomyocarditis virus, prostaglandin E1 inhibition, cell

Replication, (continued)

culture 7385.
retrovirus, cell culture, coumermycin A, inhibition 9126.
tump rosette virus RNA, Brassica rapa protoplasts 2045.
verapamil, inhibition, influenza A virus, MDCK cells 8331.
vesicular stomatitis virus, HeLa cells, nucleotides, antiviral activity 8334.
viruses, 2-bromo-2-chloro-1,1,1-trifluoroethane, effects on 6474.

Repressors,

binding sites, transposon Tn10, genetic control, tetracycline, antibiotic resistance, *Escherichia coli* 1315.

Reproduction,

herpes simplex virus 1, cell culture, nucleic acids pretreatment effects on 463.
inhibition, infection, bean yellow mosaic virus, Echtes Ackerbohnen-mosaic virus, pea leaf roll virus, Vicia faba 7938.
turkeys, females, feeding regimes, Fusarium mycotoxins 3720.

Reproductive organs,

growth, relationship nitrogenase, acetylene reduction, actinorhizas, *Alnus glutinosa* 8155.

Reptilia,

feces, *Salmonella* cultivation techniques, zoological gardens 4208.

Resazurin,

reduction, microorganisms biological activity, monitoring, activated sludge 549.

Resazurin test,

toxicity testing, soil microorganisms 398.

Research programs,

biotechnology, books 9338.
digestion (anaerobic), recommendations 7506.

Reservoirs,

biodegradation, wood, aquatic microorganisms, sub-polar environments 7838.
British Isles, coliform concentrations, models analysis 2401.
microbial pollution, actinomycetes, fungi, odor intensity, relationship pH, oxygen 3212.

oil recovery, reviews, hydrocarbon-degrading bacteria 8286.
pollution effects, mines acids drainage, leaf litter decomposition, bacteria 4429.

Residues,

captain, use, disease control, scab, *Malus pumila* 8925.

Resin,

Daemonorops draco, antibacterial activity, *Staphylococcus aureus* 2211.

Rhizinas,

adsorption rotavirus (simian) SA11, poliovirus 1, drinking water 1498.
effects on *Aspergillus niger* morphology, use, biomass measuring techniques 1677.
leaves, *Hymenaea*, *Copaifera*, antifungal activity, *Pestalotia subcuticularis* 5506.

Resistant mutant,

arsenic acid, relationship streptothricin biosynthesis, *Streptomyces noursei* 6572.

Bacillus thuringiensis, U.V. radiation, temperature, use biological control, insects 6746.

catabolite repression, *Trichoderma reesei*, cellulase, production, screening, media (enrichment) 1797.

Escherichia coli, formation, globomycin effects on 6556.

L-serine analogues, bacteria, L-serine biosynthesis enhancement 1705.

Thermomonospora curvata, catabolite repression, cellulase biosynthesis 1746.

Respiration,

activated sludge, bioassays, toxicity testing, chemical pollution, pollution monitoring 543.

depolymerization, lignin biodegradation, *Phanerochaete chrysosporium* 7817.

gas chromatography, soil microorganisms, bacteria 400.

inhibition, antibacterial agents, *Klebsiella* 4751.

Lagunomaso, nodules, roots, nitrogen fixation, *Rhizobium* 2957.

metabolism, tin antifungal activity, *Cunninghamella echinulata*, *Fusarium oxysporum* 1341.

monitoring, sewage sludge, composting 5842.

soil microorganisms, association, water potential, soils (loam) 2149.

soil microorganisms, herbicides effects on 8254.

soil microorganisms, iprodione effects on 1286.

soil microorganisms, soil characteristics, grasslands 395.

soil microorganisms, 2-4-D, pesticide pollution 412.

soil, microorganisms biomass, nitrogen soil amendment 2931.

Triticum aestivum, relationship, *Pseudocercospora herpotrichoides* eye spot 2795.

uncouplers, turrimycin biosynthesis, *Streptomyces hygroscopicus* 4872.

Respiration (cyanide insensitive),

cytochromes, correlation, cyanide, resistance, bacteria 9045.

lysine biosynthesis, *Brevibacterium flavum* 4267.

lysine production, chemostats, *Brevibacterium flavum* 7669.

Respiratory enzymes,

mitochondria, induction, n-alkanes metabolism, *Lodderomyces* 7307.

Respiratory quotient,

monitoring, biomass production, optimization, continuous culture, *Saccharomyces cerevisiae* 8501.

Respiratory syncytial virus,

antibodies, detection, enzyme-linked immunosorbent assay 1564.

antibodies, enzyme-linked immunosorbent assay methodology, comparison, complement fixation, neutralization 5008.

antibodies, specificity, immunoprecipitation, electrophoresis, methodology 7566.

antiviral activity, interferon 1346.

clinical isolates, detection, immunofluorescence 613.

detection, enzyme-linked immunosorbent assay, methodology 1561.

detection, nasopharynx secretions, fluorescent antibody test 1556.

detection, nasopharynx secretions, use, immunoperoxidase test, man 3234.

infection, enzyme-linked immunosorbent assay diagnosis, children 1564.

proteins, immunoprecipitation, identification, methodology 645.

proteins, purification, characterization 4269.

temperature-sensitive mutant, proteins, purification, characterization, infected cell culture 3437.

vaccines production, genomes characterization 6630.

Respiratory tract,

isolation, bacteria, antibiotic sensitivity testing 3088.

man, *Mycobacterium* recovery, radiometry methodology 1680.

Streptococcus pneumoniae, detection, anaerobic conditions, incubation 5908.

viruses isolates, antiviral activity, interferon, cattle 4759.

Respiratory tract diseases,

Chlamydia trachomatis antibodies, immunofluorescence, man 4196.

Restriction endonuclease mapping,

DNA, plasmids, antibiotic resistance, tetracycline, *Haemophilus ducreyi* 3027.

Restriction endonuclease mapping, (continued)

typing, clinical isolates, herpes simplex virus 7558.

Retinoic acid,

effects on herpes simplex virus 1 replication 9110.

Retinol,

antifungal activity, antibacterial activity 6491.

derivatives, antimicrobial activity 6486.

Retinylphosphate mannose,

Saccharomyces cerevisiae, biosynthesis, biochemical characteristics 2631.

Retrovirus,

infection, fibroblasts, leupeptin inhibition 469.

γ -interferon, antiviral activity, cell culture 7390.

replication, cell culture, coumermycin A, inhibition 9126.

Retrovirus (avian),

disinfectants antiviral activity 4026.

Retrovirus (feline),

quantification, immunoassays methodology, cell culture monolayers 6749.

Retrovirus (murine),

quantification, immunoassays methodology, cell culture monolayers 6749.

Retting,

Aspergillus niger, fibers, *Cocos nucifera* 7792.

Erwinia carotovora pectinolytic enzymes, bark, *Broussonetia kazinoki* 7680.

fermented food, cassava, organoleptic evaluation, lactic acid bacteria,

Corynebacterium, *Bacillus*, *Candida* 3698.

Reverse osmosis,

membranes, fouling, *Mycobacterium* cell adhesion kinetics, wastewater treatment 2383.

Reviews,

actinorhizas, nitrogen fixation, *Casuarinaceae*, tropical environment 2914.

affinity chromatography, purification, fermentation products, biotechnology 5227.

allatoxisosis, association, food contamination, man, domestic animals, historical account 7046.

allatoxins food contamination, aflatoxicosis association, historical account 7049.

allatoxins food contamination, corn, control 222.

allatoxins food contamination, production, grain, companion, *Zea mays*, factors affecting 7052.

Agrobacterium radiobacter, biological control, crown gall, fruit trees 333.

airborne microorganisms, fungi, sampling, measuring techniques, incidence 803.

alginate acid, biosynthesis, industrial applications, *Pseudomonas*, *Azotobacter* 5818.

alkylic alkanes, biodegradation, metabolism, microorganisms 8281.

alkylic ring biodegradation 8277.

alkaloids, chemical properties, biological properties 4241.

alkanes, biodegradation, metabolism, microorganisms 8280.

Alternaria toxins, host-pathogen interactions, plant diseases 5393.

amatoxins, phallotoxins 2758.

α -amylase, β -amylase, α -D-glucosidase, biotechnology, microorganisms 2596.

anaerobic bacteria, culture systems, identification, media (transport) 7610.

anthramycin biosynthesis pathway, models, *Streptomyces refuineus* 4375.

antibacterial activity, cephalaxin 9184.

antibacterial agents, activity, effects on, cell membranes, ribosomes, nucleic acids, amino groups, bacteria 9094.

antibiotic resistance, β -lactam antibiotics, β -lactamase, bacteria 9050.

antibiotic resistance, aminoglycoside antibiotics, bacteria 9051.

antibiotic resistance, bacteria 9067.

antibiotic resistance, chloramphenicol, bacteria 9052.

antibiotic resistance, erythromycin, *Staphylococcus aureus* 9055.

antibiotic resistance, mechanisms, antibiotics, structure-activity relationships 9063.

antibiotic resistance mechanisms, mutation, bacteria 9048.

antibiotic resistance, plasmids transfer, anaerobic bacteria 7335.

antibiotic resistance, relationship antibiotics biosynthesis, bacteria 9057.

antibiotic resistance, *Staphylococcus aureus*, *Streptococcus* 9060.

antibiotic sensitivity testing, factors affecting, methodology 3282.

antibiotics, antibacterial activity 4068.

antibiotics, antibacterial activity, inhibition, protein biosynthesis, nucleic acids, cytoplasmic membranes, cell walls biosynthesis, tetrahydrofolate biosynthesis 9174.

antibiotics, antibacterial activity, structure-activity relationships, clinical trials 9172.

antibiotics, antifungal agents, antiviral agents, antimicrobial activity, structure, resistance, bacteria, fungi, viruses 2234.

antibiotics antimicrobial activity, biochemical characteristics 6494.

antibiotics, drugs, antimicrobial activity, clinical trials, pharmacokinetics, pharmacology, pediatrics 5942.

antibiotics, feeds additives, antibiotic resistance, bacteria, livestock 9062.

antibiotics, *Haemophilus influenzae* 6408.

antibiotics production, cloning vectors, genes, *Streptomyces* 4845.

antibiotics production, relationship spore germination, *Bacillus levnis* 4038.

antimicrobial activity, butylated hydroxyanisole, butylated hydroxytoluene, antioxidants, food 8717.

antimicrobial bacteria, antimicrobial activity, disinfectants, antiseptics, preservatives, bacteria, viruses, fungi 9137.

antimicrobial agents, drug sensitivity testing, antibacterial activity, antifungal activity, efficacy 9138.

antitubercular agents, pharmacology 5725.

antiviral agents, antiviral activity 5745.

antiviral agents, antiviral activity, clinical trials 5750.

aromatic compounds biodegradation pathway, characterization, plasmids genetic control 8279.

aromatic compounds, digestion (anaerobic) 7830.

aromatic hydrocarbons, biodegradation, metabolism, microorganisms 8282.

Ascochyta, blight, *Cicer arietinum* 3785.

Ascochyta rabiei blight, *Cicer arietinum*, disease control, seed-borne diseases 3905.

Ascochyta rabiei blight, *Cicer arietinum*, Pakistan 3789.

assays, methodology, antibiotics, antimicrobial agents 9173.

Bacillus, *Clostridium*, spore germination, inactivation, acids, food 7026.

bacteria, β -lactam antibiotics antibiotic resistance, β -lactamase role 438.

bacteria, antibiotic resistance mechanisms, antibiotics uptake 9049.

bacteria, antibiotic resistance mechanisms, evolution, selection 9056.

bacteria, biodegradation, dibenzothophene, thiaphenene, 2-thiophenecarboxylic acid 7825.

Reviews, (continued)

bacteria, biodegradation, oil, sampling, enumeration 4437.
 bacteria, biodegradation, phthalic acid 7828.
 bacteria, catabolism, pathway evolution, enzymes activity, reviews 7821.
 bacteria, cellulose biosynthesis 4353.
 bacteria clinical isolates identification 8467.
 bacteria, clinical isolates, mercury, resistance, detoxification 9071.
 bacteria, contamination, milk, factors affecting 1897.
 bacteria, cryopreservation, methodology 744.
 bacteria, detection, milk, methodology 207.
 bacteria, disinfection, sterilization 2236.
 bacteria endotoxins, Limulus lysate test 4490.
 bacteria, enhancement, oil, recovery 3004.
 bacteria, gastrointestinal tract infection, pathogenesis, man, vaccines development 2325.
 bacteria, genetic engineering, fermentation, proteins, recovery 7812.
 bacteria, host-pathogen interactions, plants 4497.
 bacteria, isolation, media (culture), identification, methodology 5055.
 bacteria, polysaccharides capsules, vaccines, immunogenicity, man 3184.
 bacteria, structure, physiology, relationship, antibiotics activity 9168.
 bibliographies, denitrification, wastewater treatment 4908.
 bibliographies, dairy industry, wastewater treatment 4914.
 bibliographies, disinfection, wastewater treatment 4909.
 bibliographies, industrial wastes, wastewater treatment 4917.
 bibliographies, microbial pollution, water analysis 4946.
 bibliographies, public health, land disposal, wastewater treatment 4911.
 bibliographies, waste water, land disposal 4910.
 bibliographies, wastewater treatment, activated sludge 4905.
 bibliographies, wastewater treatment, digestion (anaerobic) 4907.
 bibliographies, wastewater treatment, industrial wastes, breweries 4913.
 bibliographies, wastewater treatment, lagoons 4906.
 bibliographies, wastewater treatment, meat industry 4912.
 bibliographies, wastewater treatment, oil and gas industry 4916.
 bibliographies, wastewater treatment, rotating discs 4904.
 bibliographies, wastewater treatment, textile industry, industrial wastes 4915.
 bibliographies, water pollution, indicator species, microbial pollution 4944.
 bibliographies, water-borne diseases, drinking water 4947.
 bioaccumulation, metals, leaching, microorganisms 5692.
 biodegradation assays, methodology comparison 7822.
 biodegradation hydrocarbons 8276.
 biodegradation, hydrocarbons, aromatic compounds 8278.
 bioreactors, fermentation, microorganisms 5875.
 biosynthesis, chitosan, chitin, cellulose, industrial applications, microorganisms 8619.
 biotechnology, books 5293.
 biotechnology, use, pulp mills, paper mills, wastewater treatment, production 8397.
 Bivalvia, viruses carriage, public health risks, aquaculture 2386.
 carbon cycle, microorganisms 8205.
 cefotaxim antibacterial activity, β -lactam antibiotics antagonism 507.
 cellulase, lignocelluloses hydrolysis, use sugar fermentation, microorganisms 2599.
 cellulase, production, activity, Clostridium 100.
 cephalosporins, antibacterial activity, toxicity, pharmacokinetics 5767.
 chitin, biotechnology, fungi 5201.
 chloramphenicol pharmacology 5780.
 chrysomelids, intercast, microorganisms, soil 4624.
 cinnimoxazole, antibacterial activity, antibiotic synergism, pharmacokinetics 5731.
 crops plant diseases, viruses, control, ecological evaluation 3764.
 cytochrome C oxidase, metals centers, E.S.R., *Saccharomyces cerevisiae* 5180.
 dairy starters 8710.
 dairy starters, *Streptococcus* group N, *Leuconostoc*, phages contamination 210.
 dairy starters, use, thermophilic bacteria 212.
 denitrification, agricultural practices, crop fields 5671.
 denitrifying bacteria, denitrification, nitrogen cycle, soil 4655.
 dextrans, biosynthesis, industrial applications, *Leuconostoc* 8617.
 digestion (anaerobic), bioreactors, design 1486.
 digestion (anaerobic), methanogenesis, peat 8273.
 disease control, Humulus lupulus downy mildew, *Pseudoperonospora humuli*, comparison, disease resistance cultivars, pruning, fungicides 1170.
 disease resistance, cross-protection, induction resistance, plants 5484.
 disease resistance plant breeding 4576.
 disease resistance, plant breeding 8892.
 drug resistance, bacteria 9069.
 drug resistance, clinical isolates, animal isolates, gram-negative bacteria 9058.
 drug resistance, folic acid biosynthesis pathway inhibitors, bacteria 9053.
 ectomycorrhizas inoculation trees, methodology 831.
 ectomycorrhizas, inoculation, trees response association, environmental effects 345.
 ectomycorrhizas inoculation, trees response association, factors affecting 349.
 ectomycorrhizas, interaction, plants roots pathogens, fungi 393.
 ectomycorrhizas, isolation, pure culture, methodology, nutrient requirements 829.
 ectomycorrhizas trees inoculum production, methodology 830.
 ectomycorrhizas, interaction, soil-borne diseases fungi, Nematoda plants pathogens 392.
 environmental effects plants response association vesicular-arbuscular mycorrhizas 390.
 environmental monitoring, viruses microbial pollution, measuring techniques 2387.
 enzymes immobilization methodology 6032.
 ergot alkaloids production, biotechnology, fungi 4379.
 erythromycin, lincomycin, clindamycin, antibacterial activity, pediatrics, in vitro 5783.
 ethanol, fermentation, continuous culture 6117.
 ethanol, production, carbohydrates conversion, microorganisms 5272.
 ethanol, production, fermentation, South America 6108.
 ethanol, production, methodology 6111.
 fast-growing Rhizobium, nitrogen fixation, nodulation, nif gene, nod gene, gene mapping, linkage, nif gene, *Leguminosae* 2966.
 fermentation, genetic engineering, gene transfer, *Clostridium*, *Bacillus* 3593.
 fermented food, microorganisms 5325.
 fermented food production, role, lactic acid bacteria 211.
 fermented milk products, Egypt 4461.
 fermenters, characterization 5876.
 fermenters, environmental factors 995.
 fertilizer applications, nitrogen fixation, Oryza 414.

Reviews, (continued)

filtration, separation, proteins, enzymes, microorganisms 8586.
 fireblight, host plants, symptoms, disease control 7166.
 food contamination, ochratoxin A 7060.
 food, preservation, ionizing radiation 8714.
 food-borne diseases, bacteria classification 1896.
 fuels, production, biotechnology, yeasts, fermentation, methodology 7803.
 fungi, isolation, media (culture), identification, methodology 5082.
 fungi mycelia immobilization, utilization 8486.
 fungi plant diseases, control 2843.
 Fusarium, biodegradation, pharmaceuticals 6956.
 Fusarium, biological control, insects 6926.
 Fusarium, interspecific relationships, insects, host range, biological control 5215.
 Fusarium, mycotoxins, biosynthesis 7105.
 Fusarium, mycotoxins, biosynthesis, role, plant diseases 7100.
 Fusarium, mycotoxins, contamination, food 7102.
 Fusarium, mycotoxins, detection 7104.
 Fusarium, plant diseases, chlamydosporos, role, survival, pathogenesis 7189.
 Fusarium, plant diseases, mycotoxins, biodegradation, biomass, production, biological control, books 7649.
 Fusarium, scab, Gramineae, pathology, zearalenone production, animals ingestion, toxicity 7056.
 genetic analysis, plasmids, hydrocarbons biodegradation, hydrocarbon-degrading bacteria 8284.
 genetic engineering, microorganisms, fermentation strains improvements 6124.
 genetic engineering, pharmaceuticals production, microorganisms 8652.
 genetic engineering, single-cell protein production, microorganisms 3419.
 β -D-glucosidase, microorganisms 8567.
 glutamic acid overproduction, metabolic pathways, *Corynebacterium glutamicum* 7667.
 gram-negative bacteria, antibiotic resistance, β -lactam antibiotics, β -lactamase 3036.
 ground water, enterovirus levels, disease transmission 2385.
 Helminthosporium T-toxin, Zea mays susceptibility 1123.
 host-pathogen interactions, disease resistance, plant breeding 3871.
 host-pathogen interactions, genotype-environment interactions, disease resistance, plant breeding, crops 2868.
 host-pathogen interactions, plant diseases 4494.
 hydrocarbons, gases, biodegradation, metabolism, microorganisms 8283.
 9-(2-hydroxyethoxymethyl)guanine, side effects, central nervous system, antiviral activity, clinical aspects, man 474.
 ice nucleation bacteria, frost, plants 4556.
 imidazoles, triazoles, derivatives, antifungal activity, structure-activity relationships 6311.
 immobilized cells 5102.
 immobilized cells, immobilization, organelles, biotechnology 4976.
 immobilized cells, immobilized enzymes 8577.
 immobilized cells, immobilized enzymes, industries, China, People's Rep. 77.
 immobilized enzymes 56.
 immobilized enzymes, food industry 5139.
 immunoassays, clinical microbiology 585.
 industrial applications, antibiotics production, fermentation, cheese production, fungi, yeasts 9169.
 industrial wastes, soil pollution, microorganisms, biodegradation 1018.
 interferon, antiviral activity, viruses, characterization 8327.
 interferon like compounds, plants, disease resistance, plant viruses 4573.
 ketoconazole antifungal activity 7381.
 β -lactam antibiotics, fermentation 5760.
 β -lactamase, role antibiotic resistance, infection, clinical aspects, man 3031.
 lactic acid bacteria, food contamination, meat, meat products 209.
 lactic acid bacteria, proteolytic enzymes characterization, role, milk products production, lactic acid bacteria 96.
 lignin biodegradation 7829.
 lignin, biosynthesis, biodegradation, biotechnology 3599.
 low molecular weight enzymes inhibitors, antibiotics 490.
 low molecular weight proteinase inhibitors, membranes binding, microorganisms 5184.
 man, leprosy, dapsone drug resistance 3023.
 metabolism, furan, tetrahydrofuran 7824.
 methane biosynthesis, digestion (anaerobic), energy resources 8271.
 methane production, crop residues fermentation, microorganisms 5703.
 methanogenesis 4400.
 methanogenesis, methanogenic bacteria 8267.
 methanol biodegradation, metabolites production, biotechnology, methylotrophic bacteria 5228.
 methionine adenosyltransferase, adenosylmethionine decarboxylase, purification, characterization, Escherichia coli, *Saccharomyces cerevisiae* 8569.
 methodology enzymes purification, characterization 4306.
 methylnazoles, antibacterial activity, clinical trials, pharmacokinetics, pediatrics 5732.
 microorganisms biodegradation aromatic compounds + halogens, mechanisms 7826.
 microorganisms, biodegradation, organic matter, succession, community development, soil 4625.
 microorganisms, biodegradation, petroleum 8287.
 microorganisms, biodegradation, wood, lignin, cellulose 4436.
 microorganisms, biological control, insects 6077.
 microorganisms, biomass, enumeration, measuring techniques 4973.
 microorganisms cell culture, biotechnology 4970.
 microorganisms, contamination, beer 6147.
 microorganisms contamination, pharmaceuticals 9148.
 microorganisms contamination, quality control, pharmaceuticals industries 9147.
 microorganisms, ecological evaluation, laboratories, continuous culture, batch culture, methodology 4974.
 microorganisms, ecosystem analysis, interspecies relationships, isolation, media (culture), measuring techniques, books 5092.
 microorganisms, enzymes, production 2627.
 microorganisms, ethanol, production, fermentation 6110.
 microorganisms growth models, kinetics, energetics 2427.
 microorganisms, identification, methodology, clinical microbiology 2322.
 microorganisms, immobilized enzymes, use, catalysis, chemicals, production 6031.
 microorganisms, mineralization, nitrogen, soil, factors affecting 4653.
 microorganisms, organic matter decomposition, nutrient dynamics, ecosystem analysis, peatlands 7254.
 microorganisms, plant diseases, virulence, pathology 4492.

Reviews, (continued)

- microorganisms, recovery, fermenters, methodology 7655.
microorganisms, role, waste disposal, industrial wastes 6704.
microorganisms, spoilage, beverages, bottles 7872.
microorganisms toxins, phytotoxicity 3756.
microorganisms, use, leaching, Minerals, methodology 8263.
microorganisms, wastes, biochemical oxygen demand, chemical oxygen demand, measuring techniques, enumeration, waste water, biochemical characteristics 4918.
microorganisms, weathering, biogeochemistry 8210.
mixed culture interaction, microorganisms 1531.
molds, Gramineae, plant diseases, disease control 5430.
mucopolysaccharide, antimicrobial activity 536.
Mycobacterium, antimycobacterial agents, drug resistance 9061.
Mycobacterium leprae staining 3340.
mycorrhizas, morphology, classification, isolation, media (culture), growth 4628.
mycorrhizas, radioactive labelling, chemicals, association, flux, methodology 833.
mycorrhizas, roots, plants 5647.
mycorrhizas, ultrastructure, microscopy, fixation methodology 834.
mycotoxicosis, Fusarium, food poisoning, domestic animals 7017.
mycotoxins 7063.
mycotoxins antibodies association, production, use, detection, food contamination, serum levels 7082.
mycotoxins contamination, assays, dietary intake safety, man 7045.
mycotoxins food contamination, decontamination methodology 7073.
mycotoxins food contamination, man, animals, screening methodology 7079.
mycotoxins food contamination, safety regulations, limitations 7065.
mycotoxins food contamination, screening, prevention, control association food processing 7070.
mycotoxins tissues levels, metabolism, animals, cow's milk, eggs, role transmission 707.
nitrification, nitrifying bacteria, soil 4654.
nitrite reductase (cytochrome) reduction, nitrite, denitrification, *Pseudomonas aeruginosa* 7708.
nitrogen cycle, agricultural land, Denmark 2984.
nitrogen cycle, microorganisms 8240.
nitrogen fixation, actinorhizias, agroforestry, temperate environments 2915.
nitrogen fixation, bacteria, biochemical characteristics, regulation, nitrogenase 4656.
nitrogen fixation, crops, soil microorganisms 410.
nitrogen fixation, plant cells culture, nitrogen-fixing bacteria 2156.
nitrogenase, structure-activity relationships, nitrogen fixation, nitrogen-fixing bacteria 2906.
nucleosides analogs, antiviral activity 9130.
nutrient cycles, iron, biogeochemistry, microorganisms 8208.
nutrient cycles, silicon, biogeochemistry, microorganisms 8207.
nutrient cycles, sulfur, biogeochemistry, microorganisms 8206.
nutrients, manganese, biogeochemistry, microorganisms 8209.
oil recovery, reservoirs, shales, use hydrocarbon-degrading bacteria 8286.
organic compounds biodegradation, books 8495.
organic compounds biodegradation, genetics, *Pseudomonas* 1013.
PCB biodegradation, fungi, bacteria 7827.
pectinolytic enzymes, applications, food industry, microorganisms 2598.
peptide antibiotics, biosynthesis, production, use, immobilized cells, immobilized enzymes 1410.
pesticides biodegradation, microorganisms enzymes 1019.
pesticides, effects on, soil microorganisms, soil, measuring techniques 4673.
pesticides (organochlorine), biodegradation, bacteria 1014.
petroleum biodegradation, soil microorganisms 8285.
petroleum, wastewater treatment, industrial effluents, oil and gas industry 8403.
pharmaceuticals contamination, microorganisms, nosocomial environments 9149.
pharmaceuticals, microorganisms, contamination, production, antibiotics, antimicrobial agents, antimicrobial activity, books 9343.
pharmaceuticals production, fungi, bacteria 8651.
pharmaceuticals quality control 9150.
pharmaceuticals sterilization 1415.
pharmaceuticals sterilization, fungi, viruses 9144.
pharmaceuticals sterilization quality control 9146.
phosphate, antimicrobial activity, food 6981.
phosphorus cycle, soil, bacteria 4626.
plant breeding, disease resistance 2883.
plant breeding, disease resistance 8095.
plant cells culture, disease resistance, host-pathogen interactions, role phytoalexins 2056.
plant diseases, chemical control, epidemiology mathematical models 4496.
plant diseases, pathogenesis, microorganisms 4493.
plant viruses infection, effects on Rhizobium nodulation, nitrogen fixation, reviews 8780.
plant viruses infection effects on Rhizobium nodulation, nitrogen fixation, Leguminosae 8780.
plants, rhizosphere, interaction, microorganisms, characterization 4627.
plants, vesicular-arbuscular mycorrhizas symbiosis effects on, measuring techniques 389.
pollutants biodegradation, plasmids, genetic engineering, bacteria 4435.
polysaccharides, fungi, yeasts 8620.
polysaccharides, industrial applications, bacteria 8622.
polysaccharides structures, fungi 2632.
production, benzylpenicillin, streptomycin, griseofulvin 9171.
production, vaccines, antisera, immune serum globulin, industrial applications, bacteria, viruses 9218.
proteinase, industries, microorganisms 2602.
protoplast fusion fungi 6801.
Pseudomonas aeruginosa cytotoxins pathogenicity, *Manduca sexta* biological control 5211.
Rhizobium bacteroids, metabolism, carbohydrates, organic acids, nodules, Leguminosae 2975.
Rhizobium, interaction, plants, nitrogen fixation 4659.
Rhizobium meliloti, plasmids, role, nodulation, nitrogen fixation, Medicago sativa, gene mapping 4660.
Rhizobium, nodulation, legumes, nitrogen fixation, media (culture) 4657.
rRNA active sites, antibiotics effects on, ribosomes 1428.
rumen microorganisms, plants cell walls digestion 3669.
Saccharomyces, brewing, genetic engineering 4407.
Saccharomyces cerevisiae, *Zymomonas mobilis*, genetic engineering, ethanol, production, fermentation 6112.
secondary metabolites, microorganisms 965.
Septoria infection, Triticum aestivum, Hordeum vulgare 1985.

Reviews, (continued)

- single-cell protein production 5107.
single-cell protein production, hydrocarbons, carbon sources, fermentation 8288.
skin, microflora, sampling, methodology 4964.
sodium chloride, antibacterial activity, food 7024.
soil fungistasis, suppression, plant diseases 8764.
soil microorganisms, nutrient cycles, agricultural ecosystems 5630.
soil microorganisms, paddy fields 377.
soil-borne diseases, phytopathogenic fungi, models 5402.
solvents production, immobilized cells 3575.
spices, antimicrobial activity, characterization 6492.
sporeicides, bacteria 1323.
Streptococcus pneumoniae vaccines use, lymphocytes B function analysis, man 3356.
structure-activity relationships, antibiotics, antimicrobial agents 9170.
sulfate-reducing bacteria, corrosion, pipes, oil and gas industry 8411.
suppressive soils induction, biological control, soil-borne diseases, phytopathogenic fungi 331.
suppressive soils, soil properties, soil-borne diseases, phytopathogenic fungi 329.
surfactants biosynthesis, metabolic pathways, microorganisms 7776.
surfactants, surfaces interaction microorganisms 4392.
symbiosis, books 845.
tetrahydropyros biosynthesis, bacteria 4380.
triacylglycerol lipase, extracellular enzymes, food industry, microorganisms 2604.
ultrahigh temperature sterilization, food 7032.
vaccines production, veterinary medicine, bacteria, viruses 5806.
vaccines production, viruses 7480.
vaccines production, viruses 9220.
vancomycin, antibacterial activity mechanisms, chemical properties 5804.
vesicular-arbuscular mycorrhizas inoculation, plants, methodology 827.
vesicular-arbuscular mycorrhizas inoculum production 826.
vesicular-arbuscular mycorrhizas, mixed culture, methodology, reviews 828.
vesicular-arbuscular mycorrhizas, plants roots, measuring techniques 825.
vesicular-arbuscular mycorrhizas propagules, isolation methodology, measuring techniques, soil 824.
vesicular-arbuscular mycorrhizas, spore germination, growth, factors affecting 391.
vesicular-arbuscular mycorrhizas, symbiosis, plant cells culture systems, aseptis 2120.
viability, *Saccharomyces cerevisiae*, ethanol, effects on, temperature, relationship 6106.
Vibrio cholerae, toxins 2768.
viruses, antiviral agents, antiviral activity, characterization 8326.
viruses, biological control, insects 7702.
viruses disease transmission, *Rubus* 8004.
viruses, DNA, genetic engineering, vaccines 8386.
viruses level, detection methodology, surface water, drinking water 2384.
viruses, levels standardization, waste water, disease transmission 2334.
viruses microbial pollution, public health risks, standards, environmental monitoring, books 2537.
viruses microbial pollution, sewage sludge, effluents, land disposal 2335.
viruses, microbial pollution, waste water aerosols irrigation, public health risks 2336.
waste water, disinfection 1478.
wine production, lactic acid bacteria malolactic fermentation 173.
Xanthomonas campestris pv. malvacearum, blight, disease control, plant breeding, host-pathogen interactions, *Gossypium hirsutum* 3846.
xenobiotics binding humus, soil microorganisms association 1258.
xenobiotics biodegradation, bacteria 1011.
xenobiotics biodegradation, bacteria 1012.
xylose isomerase, biotechnology, bacteria 2597.
yeasts, Fusarium, mucor, ethanol, production, fermentation, cellulose 6107.
yeasts, single-cell protein, fermentation 2752.
Zymomonas mobilis, ethanol, production, fermentation, methodology 6109.
- Rhabdovirus**, predator-prey interactions, nematophagous fungi, Mexico 2126.
- Rhabdovirus**, like viruses, isolation, *Passiflora edulis* 266.
transmission, *Ribautodelphax notabilis* role, Gramineae, Iran 262.
- Rhamnus cathartica**, *Phellinus punctatus* incidence, USA, North Dakota 3838.
- Rhizobitoxine**, *Bradyrhizobium japonicum* role, protection, Glycine max, charcoal rot, *Macrophomina phaseolina* 4509.
- Rhizobium**, antibacterial activity, pesticides, fungicides 1324.
bacteroids, nitrogenase, acetylene reduction, oxygen effects on, nodules, Vigna unguiculata, *Arachis hypogaea* 7291.
bacteroids plasma membranes, role, nitrogen fixation, nodules, Leguminosae 2976.
effects on, *Phytophthora cinnamomi*, sporulation, zoospores, survival 7282.
fast-growing, nitrogen fixation, nodulation, nif gene, nod gene, gene mapping, linkage, gene transfer, reviews, Leguminosae 2966.
+Glycine fasciculatum, +phosphate, inoculation, Vigna unguiculata, *Cajanus cajan* 2945.
= Glycine fasciculatum, inoculation, yield, *Leucaena leucocephala* 7276.
-Glycine mossae, inoculation, growth stimulation, *Acacia holosericea*, *Acacia radiata* 6355.
+Glycine mossae, symbiosis, effects on, *Acacia holosericea*, *Acacia radiata*, growth 8969.
 β -D-glucans structure 948.
growth, antagonism, saprophytes, fungi 7248.
growth, autotrophy, hydrocarbons isolation, characterization 3461.
growth rate, inhibition, pH, salinity, isolates, *Arachis hypogaea* 2170.
gums, polysaccharides structure 4368.
host specificity, Leguminosae 9004.
hydrogenase activity, Vigna radiata, Vigna unguiculata 4664.
hydrogenase kinetics, gene manipulation, hup gene 3008.
infection, *Sesbania rostrata* nodules infection, urate oxidase subunits 4668.
infection, *Sesbania rostrata* nodules calluses, pathogenesis 3798.
inoculation, *Arachis hypogaea*, field trials 4646.
inoculation, +carboran, seed treatments, nodulation, Glycine max 2990.
inoculation, Glycine max, effects on yield 5677.
inoculation, Leguminosae, biotechnology 6377.
inoculation, Leguminosae nodulation, nitrogen yield, Colombia soil types 2158.
inoculation, nodulation, fertilizer applications effects on, Vigna unguiculata

Rhizobium, (continued)

2983.
inoculation, nodulation, *Glycine* max 6371.
inoculation, nodulation, *Leucaena leucocephala* 6373.
inoculation, nodulation, *Medicago sativa* 5683.
inoculation+vesicular-arbuscular mycorrhizas, nodulation, nitrogen fixation, fertilizers effects on, *Trifolium repens* 5628.
inoculum, bagasse, soil, carriers, cold storage, yield, *Vigna unguiculata* 2982.
inoculum production, *Leguminosae* 6369.
interaction, *Cicer arietinum* rhizosphere 4669.
interaction *Metarhizium*, media (culture), tropical environment soil 5634.
interaction, plants, nitrogen fixation, reviews 4659.
leaf-roll, *Cajanus cajan* 6232.
mutants, nitrogen fixation, acetylene reduction, nodulation, *Glycine* max 2989.
nitrogen fixation, acetylene reduction, varieties, *Vigna unguiculata* 4645.
nitrogen fixation, agriculture, crop fields 3345.
nitrogen fixation, *Arachis hypogaea*, *Vigna unguiculata*, characterization 9019.
nitrogen fixation, energy metabolism, electron transport chain, nodules, *Pisum sativum* 2972.
nitrogen fixation, enhancement, growth, association, syntrophism 4661.
nitrogen fixation, fertilizers, nitrogen sources, nodulation, *Trifolium repens*, *Lotus pedunculatus* 2160.
nitrogen fixation, genetic analysis 1281.
nitrogen fixation, genetic analysis, symbiosis, *Leguminosae* 9006.
nitrogen fixation, inoculation, *Vigna sinensis*, *Cicer arietinum* 8999.
nitrogen fixation, inoculum, genetic resources, gene pools, research programs, *Leguminosae* 2965.
nitrogen fixation, *Juglans*, allelopathy 3959.
nitrogen fixation, nitrogen-15, environmental chambers, *Trifolium subterraneum* 2985.
nitrogen fixation, nitrogen-15 measurements, *Leguminosae* 7270.
nitrogen fixation, nitrogen-15, measuring techniques, crop fields, *Glycine* max 7289.
nitrogen fixation, nitrogenase, nodules, respiration, energy balance, *Glycine* max 8251.
nitrogen fixation, nodulation, inheritance, plant breeding, *Medicago sativa* 2979.
nitrogen fixation, nodulation, *Parasponia* 2977.
nitrogen fixation, nodulation, soil moisture, salinity, effects on, *Leguminosae* 2980.
nitrogen fixation, nodules, *Acacia dealbata* seedlings 2906.
nitrogen fixation, nodules, genetic analysis, genes, leghemoglobin, nodulin, *Leguminosae* 2978.
nitrogen fixation, *Phaseolus vulgaris*, aging effects on 6361.
nitrogen fixation, *Phaseolus vulgaris*, phosphorus effects on 7286.
nitrogen fixation, pressmud, use, carriers, characterization 6374.
nitrogen fixation, respiration, roots, nodules, *Leguminosae* 2987.
nitrogen fixation, symbiosis, interaction, *Leguminosae* 9007.
nitrogen fixation, *Trifolium repens*, oxygen effects on 2958.
nitrogen fixation, *Vigna radiata*, soil moisture effects on 4640.
nitrogenase activity, acetylene inhibition, oxygen diffusion, nodules, *Leguminosae* 8252.
nitrogenase, nitrogen fixation, temperature effects on, *Vigna unguiculata* 2168.
nodulation, *Cicer arietinum* 3960.
nodulation, legumes, nitrogen fixation, media (culture), reviews 4657.
nodulation, *Leguminosae*, Malaysia 8164.
nodulation, nitrogen fixation, *Cicer arietinum*, zinc effects on 4650.
nodulation, nitrogen fixation, *Leguminosae*, plant viruses infection effects on, reviews 8780.
nodulation, role nodulin gene expression, *Pisum sativum* 2981.
nodulation, roots infection, nutrient flow, genetic analysis, *Leguminosae* 2974.
nodulation, soil amendment, calcium oxide, calcium sulfate effects on, *Cicer arietinum*, *Lens esculenta* 3015.
nodulation, *Vigna radiata* 6360.
nodulation, *Vigna radiata*, efficiency correlation antibiotic resistance 4662.
nodules, *Xylaria torrea*, *Gulbournia conjugata*, *Pholiostigma thonningii* 4667.
nodules, nitrogenase, energy metabolism, hemoglobin levels, *Parasponia* 2989.
nodules, *Streptomyces* inhibition, rhizosphere, *Vigna mungo* 6378.
nodules, *Trifolium repens*, *Medicago sativa*, survival, association, calcium oxide pelleting 2950.
physiology characterization, *Aeschynomene indica* stems nodulation 2155.
polysaccharides, oligosaccharides, extracellular, carbohydrate composition, role roots infection, *Leguminosae* 2633.
role, nitrogen cycle, books 4238.
soil inoculum, peat, carbohydrates effects on 4642.
soil isolates, soil temperature tolerance, desiccation, nodulation, tropical environment, *Vigna unguiculata* 8241.
stems nodulation, *Aeschynomene* 9010.
strains competition, *Leucaena leucocephala* nodulation, tropical environment soil 7267.
symbiosis, *Cyamopsis tetragonoloba*, phenotypes, variability 8246.
symbiosis, infectivity, preservation, methodology 5899.
symbiosis interaction, *Cicer arietinum* 4648.
symbiosis, *Leguminosae*, equipment, association, nodulation, nitrogen fixation 2955.
symbiosis, *Leguminosae*, nitrogen fixation 9005.
symbiosis, *Leguminosae*, reviews, books 845.
symbiosis, *Trifolium pratense*, nitrogen fixation, white clover mosaic virus infection 7141.
symbiosis, *Vigna radiata*, environmental stress effects on nitrogen fixation 5679.
uptake, streptomycin, association, antibiotic resistance 5713.
urides biosynthesis pathways, nodules, *Leguminosae* 2971.
Vigna unguiculata, γ radiation effects on, soils (acid) 2951.
Vigna unguiculata nodulation, soil acidity effects on 8993.

Rhizobium japonicum, (continued)

- bacteroids, poly- β -hydroxybutyrate, high-pressure liquid chromatography, characterization 1653.
capsules polysaccharides, role root hairs infection, nodulation, *Glycine* max 2970.
growth, fungi pathogens, *Glycine* max, pesticides effects on 1212.
inoculation, *Glycine* max, yield, nodulation 2122.
inoculation methodology, *Glycine* max, Saudi Arabia 2953.
inoculation, nodulation, dose-response effects, roots age, *Glycine* max 2166.
inoculation, nodulation, *Glycine* max 2952.
nitrogen fixation, *Glycine* max fruiting 2154.
nitrogen fixation, nitrogen-15 levels, nodules, *Glycine* max 2169.
nitrogen fixation, soil salinity effects on, *Glycine* max 2163.

Rhizobium japonicum, (continued)

- nitrogen fixation, translocation, vascular system, *Glycine* max 2956.
polysaccharides structure 1831.
population dynamics, plants 1272.
rhizosphere, immunofluorescence enumeration, competition, nodulation, *Pisum sativum*, *Glycine* max 2967.
soil inoculum, nodulation, *Phaseolus vulgaris* 2161.
strains competition, *Glycine* max nodulation 408.
symbiosis nitrogen fixation, relationship, rifampicin resistance mutation 2962.
- Rhizobium leguminosarum**,
capsules gels, polysaccharides 5199.
glutamine synthase cross-reactivity, *Pisum sativum* nodules 3956.
growth, soil, size association, mathematical models 9012.
interaction, *Pisum sativum* roots, nodules proteins 4644.
nitrogen fixation, ammonium nitrate effects on 5654.
nitrogen fixation, nodules, factors affecting, *Pisum sativum* 2987.
nodulation, nitrogen fixation, *Lens esculenta*, soil pH effects on 407.
nodulation, nitrogen fixation, role indole-3-acetic acid, *Pisum sativum* 2167.
plasmid pJ1008, effects on, *Rhizobium meliloti*, symbiosis, *Medicago sativa* 4649.
population dynamics, *Pisum sativum* seedlings 8233.
rhizosphere, immunofluorescence enumeration, competition, nodulation, *Pisum sativum*, *Glycine* max 2967.
root hairs symbiosis, *Lotononis bainesii*, host plants, role lectins 6382.
Vigna unguiculata, morphology, antibiotic resistance 9013.
- Rhizobium leguminosarum var. phaseoli**,
inoculation, *Phaseolus vulgaris* roots, growth, flowering 4506.
inoculum production, batch culture, media (culture) 5038.
nitrogen fixation, cultivars, nitrogen sources effects on, *Phaseolus vulgaris* 8250.
nitrogen fixation, energy balance, cultivars strains interaction, *Phaseolus vulgaris* 8238.
nodulation, *Phaseolus vulgaris* cultivars, nitrogen fixation 9021.
nodulation, *Phaseolus vulgaris*, effects 5658.
strains variability, nitrogen fixation, *Phaseolus vulgaris* 8249.
- Rhizobium leguminosarum var. phaseoli**,
inoculation, *Phaseolus vulgaris*, nodulation 6376.
- Rhizobium leguminosarum var. trifolii**,
aromatic compounds, carbon sources, role inoculum survival, soil 3961.
capsules gels, polysaccharides 5199.
capsules polysaccharides binding lectins 6368.
detection, protoplasts, *Trifolium repens*, fluorescence, microscopy 9297.
eradication, phages use, *Trifolium repens* protoplasts 8858.
growth, autotrophy, hydrogenase isolation, characterization 3461.
identification, use, alkaline phosphatase detection 9298.
inoculation, soil chemistry, soil pH effects on 7278.
inoculation, strains competition, nodulation, *Trifolium repens* 3962.
inoculation, *Trifolium repens*, soil microorganisms 5678.
inoculum, phages effects on nodulation 5662.
nitrous oxide biosynthesis, denitrification, in vitro 9020.
nodulation, aluminum toxicity, soils (acid), *Trifolium repens* 7279.
nodulation, inhibition, metals oxides, *Trifolium* 7234.
nodulation, *Trifolium subterraneum*, effects on, *Glomus fasciculatum*, *Glomus mosseae* 5615.
survival, *Trifolium vesiculosum* seeds toxicity 8994.
- Rhizobium lupini**,
isolation, *Lupinus* nodules, carbon dioxide utilization association nitrogen fixation 9022.
- Rhizobium meliloti**,
acetylene reduction, nitrogen fixation, *Medicago* 4666.
antibacterial activity, fungicides 8922.
antigenic characteristics, association, identification, electrophoresis, methodology 4184.
attraction localization, *Medicago sativa* roots 6380.
chemotaxis, motility, soil 378.
enzyme-linked immunosorbent assay, inoculum detection, soil 4174.
extracellular polymers, polysaccharides, role infectivity, nodulation, *Medicago sativa* 6372.
gene expression transposon Tn5 streptomycin, kanamycin resistance genes 442.
growth, *Verticillium* wilt, *Medicago sativa*, fungicides effects on 1211.
inoculum, viability, desiccation, soil salinity 4663.
nitrogen fixation, genetic control, symbiosis mutants, *Medicago* 5676.
nitrogen fixation, glycine betaine effects on sodium chloride tolerance 2159.
nitrogen fixation, symbiosis, *Medicago sativa*, calcium, magnesium effects on 2960.
nitrogen fixation, vesicular-arbuscular mycorrhizas inoculation effects on, *Medicago sativa* 8221.
phages production, fermenters, cloning vectors preparation 4997.
plasmids, role, nodulation, nitrogen fixation, *Medicago sativa*, gene mapping, reviews 4660.
soil inoculum, nodulation, *Phaseolus vulgaris* 2161.
strains, cell surface, nodulation, *Medicago sativa*, agglutinins 5651.
symbiosis, *Medicago sativa*, *Rhizobium leguminosarum*, plasmid pJ1008, effects on 4649.
Ti plasmid vectors, nod gene, gene expression, nodules formation, *Agrobacterium tumefaciens*, *Escherichia coli* 6366.
transposon Tn5, mediation, streptomycin, antibiotic resistance 7336.
tricarboxylic acid cycle intermediates utilization, association symbiosis 8234.
+vesicular-arbuscular mycorrhizas, effects on growth, *Medicago sativa* 6341.
- Rhizobium phaseoli**,
soil inoculum, nodulation, *Phaseolus vulgaris* 2161.
survival, inoculum, peat 406.
- Rhizobium trifolii**,
infectivity, nodulation, *Trifolium repens*, temperature effects on 1282.
inoculation, *Trifolium subterraneum*, nitrogen fixation, glyphosate soils (loam) applications effects on 2995.
populations, nitrogen fixation, *Trifolium repens* symbiosis 409.
populations, *Trifolium subterraneum* nodules, soil acidity effects on 405.
- Rhizoctonia**,
antifungal activity, miconazole 4016.
biological control, *Rhizoctonia solani* brown patch, *Agrostis palustris* 6308.
blight, *Festuca arundinacea*, disease control, fungicides 8172.
brown patch, *Stenotaphrum secundatum*, pathogenesis 1127.
disease control, composts, ornamental plants 6300.
eye spot, *Gramineae*, soil microorganisms, antagonism 7208.
growth, contamination, taints production, corks, wine 7798.
interaction, ectomycorrhizas, reviews 393.

Rhizoctonia, (continued)

pathogenicity, *Agrostis palustris*, *Cynodon dactylon*, *Festuca arundinacea*, USA, North Carolina 3802.

pod rot, *Arachis hypogaea*, calcium levels effects on pathogenesis 1121.

sensitivity, fungicides 8106.

stem rot, *Pisum sativum*, factors affecting disease resistance 1199.

Rhizoctonia bataticola

antifungal activity, diaryl methylphosphonates, structure-activity relationships 3885.

infection, *Cicer arietinum*, phenols levels 1975.

infection screening, *Cicer arietinum* 1980.

mycelia, sclerotia, soil inoculum, *Cicer arietinum* infection incidence 1976.

Rhizoctonia cerealis

eye spot, *Triticum aestivum*, effects on yield 1133.

pathogenicity, *Agrostis palustris*, USA, North Carolina 3802.

Rhizoctonia leguminicola

swainsonine, contamination, hay, *Trifolium pratense*, mycotoxicosis, horses 6728.

Rhizoctonia microsclerotia

web blight, *Phaseolus vulgaris*, genotypes, disease resistance 8060.

Rhizoctonia oryzae-sativae

spot, *Oryza sativa* 5436.

Rhizoctonia repens

endomycorrhizas, *Ophrys lutea*, laccase localization 380.

Rhizoctonia solani

antifungal activity, volatiles, leaves, *Melaleuca leucadendron* 9107.

antifungal activity, 1-methylpyrazole carboxanilides, structure-activity relationships, disease control, root rot, *Gossypium hirsutum* 5531.

antimicrobial activity, nematodes 1325.

euxotrophy, protoplast fusion 5081.

biological control, carriers, *Trichoderma harzianum*, *Gladiolus virens* 8919.

biological control, mycelia soil amendment, hyperparasitism, *Verticillium biguttatum*, *Gladiolus roseum*, *Solanum tuberosum* 2089.

brown patch, *Rhizoctonia* biological control, *Agrostis palustris* 6308.

crater disease, *Triticum aestivum*, soil fumigation+soliar radiation effects on 8123.

crop residues, *Hordeum vulgare*, *Medicago sativa*, smoke, antifungal activity 8319.

damping-off, biological control, *Agrobacterium radiobacter*, extracellular polymers, polysaccharides, seed treatments, *Lycopersicon esculentum* 6309.

damping-off, disease resistance, Philippines, *Nicotiana glauca* 7179.

damping-off, host range, pathogenicity 282.

damping-off, *Medicago sativa* seedlings, greenhouses, USA, California 1115.

damping-off, *Pinus banksiana*, *Picea mariana*, soil amendment, organic matter, effects on 1239.

damping-off, suppression, fungi antagonists, composts, *Raphanus sativus* 290.

damping-off, *Vigna unguiculata*, fungicides disease control, herbicides soil applications effects on 2090.

disease control, composting, crop residues 2842.

disease resistance, glycoalkaloids levels, tubers, *Solanum tuberosum* 8840.

disease resistance plant breeding, *Oryza sativa* 8896.

epitochy rot, *Pisum sativum*, disease resistance 6287.

growth, inhibition acetone role 1337.

m-hydroxyphenylacetic acid, m-methoxyphenylacetic acid, effects on *Glycine max*, nodulation, histopathology 1119.

hyphae, lysis, *Mycobacteriales*, soil microorganisms, biological control, plant diseases 8920.

hyphae staining, fluorescein diacetate, soil 8983.

infection, *Coffea arabica*, cells, defects 8821.

infection, *Asotobacter chroococcum* antagonism, biological control, *Solanum tuberosum* 2088.

infection, *Glycine max*, pathogenicity 240.

infection, *Phaseolus*, pathogenesis, effects on peroxidase isoenzymes 7138.

infection, seedlings, plants, disease control, cyanamide 3886.

isolates variability, sensitivity, fungicides 8117.

menozeb+curzate antifungal activity 2085.

patch, plant diseases, surveys, soils (*calcareous*) 255.

pathogenicity, *Cynodon dactylon*, USA, North Carolina 3802.

pathogenicity, *Solanum tuberosum*, British Isles 2021.

Phaseolus vulgaris disease resistance, role cuticle 1174.

phytopathogenic fungi, biological control, *Trichoderma parasitism*, ultrastructure 213.

plant disease, *Eucalyptus*, incidence, greenhouses 8942.

plant diseases, herbicides effects on, *Gossypium hirsutum* 7963.

plant diseases, *Solanum tuberosum*, biological control, *Verticillium biguttatum* 5514.

Pythium oligandrum, biological control, hyperparasitism 2079.

root rot, disease control, benomyl, PCNB, *Ficus benjamina* 8916.

root rot, disease resistance, *Phaseolus vulgaris*, genetic control, inheritance 2069.

root rot, *Phaseolus vulgaris*, herbicides effects on 1181.

root rot, disease control, agricultural practices comparison fungicides, *Phaseolus vulgaris* 1210.

sclerotia, biological control, *Verticillium biguttatum* treatment, *Lycopersicon esculentum* 325.

sheath blight, disease control, benzoxypyridazines, *Oryza sativa* 5534.

sheath blight, disease control, dipiramin A, dipiramin B, *Oryza sativa* 4863.

sheath blight, interaction, *Nitaparvata lugens*, infection, *Oryza sativa*, varieties 8789.

sheath blight, *Oryza sativa*, disease resistance 7147.

sheath blight, disease resistance, *Pisum sativum*, plant breeding 2852.

stem rot, *Pisum sativum*, disease resistance 1201.

Rhizoctonia zeae

pathogenicity, *Festuca arundinacea*, USA, North Carolina 3802.

Rhizophora

sediments, bacteria biomass, community structure, fatty acids analysis 8989.

Rhizophora mangia

lignocelluloses, biodegradation, microorganisms 2704.

lignocelluloses, lignin, polysaccharides, biodegradation, microorganisms 5305.

Rhizoplane

Phaenium americanum, *Azospirillum brasilense*, immunoperoxidase test labelling 1275.

soil microorganisms interface, electron microscopy, ultrastructure, books 1693.

Rhizoplane microorganisms

bacteria, inoculation, inhibition, *Plasmodiophora brassicae* clubroot, *Raphanus sativus* 8867.

Rhizoplane microorganisms, (continued)

bacteria, phosphorus, nitrogen, effects on, association Gramineae 6334.

Fusarium, Egypt, seasonal variations 6335.

Oryza sativa, nitrogen-fixing bacteria, isolation, activity, morphology, nutrition 8235.

Rhizopogon

isolation, pure culture, methodology, nutrient requirements, reviews 829.

Rhizopogon luteolus

trees inoculum production methodology, reviews 830.

Rhizopus

cell culture preservation 5087.

chickens feeds mycoflora, storage conditions effects on 7094.

clinical isolates

1-(4-chlorophenoxy)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,

1-(4-chlorophenoxy)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,

antifungal activity 4756.

detection, oxidase extracellular enzymes 1799.

exo-1,3- β -D-glucanase, biodegradation, *Eisenia bicyclis* β -D-glucan 3670.

exo-1,4- α -D-glucosidase immobilization, use, poly(tetrafluoroethylene)

membranes+ Coulomb force 39

extracellular enzymes production 5126.

monophenol monooxygenase, extracellular enzymes, production 7759.

PCB biodegradation, reviews 7827.

single-cell protein production, fermentation, starch residues, food industry 1713.

Rhizopus arrizus

biomass, adsorption, desorption, uranium 9028.

biomass, adsorption, uranium, thorium 3978.

charcoal rot, *Helianthus annuus*, etiology 4551.

Rhizopus chinensis

rhizoxin, structure 7112.

Rhizopus delemar

biotin biosynthesis, media (culture) 3579.

desthiobiotin conversion, biotin production 964

exo-1,4- α -D-glucosidase immobilized enzymes, kinetics starch, maltose

hydrolysis 113.

triacylglycerol lipase immobilized enzymes, fats esterification 67.

Rhizopus koji

ethanol, fermentation, *Manihot esculenta* 3610.

Rhizopus microsporus

triacylglycerol lipase biosynthesis 6872.

Rhizopus nigricans

antifungal activity, structure-activity relationships,

3,3',4,4'-tetrahydroxystilbene, wood extracts, *Cassia garretiana* 7384.

1-arylanalols stereochemistry, methodology 5249.

conversion, kauranols, kauranones 5248.

Ochromo basii, essential oils antifungal activity, in vitro 9105.

Thiophene derivatives antifungal activity, photoinduction 3060.

Rhizopus niveus

exo-1,4- α -D-glucosidase, immobilized enzymes, maltose, starch hydrolysis,

reactors 112.

exo-1,4- α -D-glucosidase, kinetics, glucose conversion, formation, maltose,

osmium base 3464.

Rhizopus nodosus

extracts, biological control, *Phytophthora parasitica* var. *piperina* rot, *Piper*

belle 5518.

triacylglycerol lipase, purification, characterization 7693.

Rhizopus oligosporus

fermentation, soybeans meals, characterization 7016.

single-cell protein, production, fermentation, cassava 1714.

Rhizopus pygmaeus

proteolytic enzymes, purification, isolation 4321.

Rhizopus rhizopodiformis

proteinase, fermentation, isolation 4299.

Rhizopus stolonifer

antifungal activity, sodium dodecylbenzene sulfonate 8054.

infection, effects on ethylene production, fruits, *Lycopersicon esculentum* 2011.

polygalacturonase, role, *Rhizopus communis* antifungal agents induction 297.

post-harvest decay, *Prunus persica*, fruits, characterization 8878.

spore germination, carbendazim, treatment, effects on, *Saccharum officinale* 8127.

Rhizopus thallandensis

immobilized cells, bioreactors, exo-1,4- α -D-glucosidase, production,

mathematical models 7729.

Rhizophaera oudemansii

needlecast, *Abies pinsapo*, pathogenesis 5608.

Rhizosphere

actinomycetes, antagonism, *Laccaria laccata*, *Pythium*, *Phytophthora*, *Eucalyptus*

marginata, *Pinus radiata* 2099.

bacteria population levels, *Zea mays*, *Vigna unguiculata*, *Colosynthis vulgaris*

7261.

Bradyrhizobium japonicum population levels, straw soil amendment effects on,

Glycine max 7822.

Cicer arietinum, *Rhizobium* interaction 4669.

colonization, *Azospirillum* inoculation, nitrogen fixation, yield, *Gramineae* 2968.

colonization, *Bradyrhizobium japonicum*, stimulation, seed treatments,

streptomycin+erythromycin+benomyl, *Glycine max* 9017.

Gossypium hirsutum, *Pythium ultimum* spore germination 1148.

immunofluorescence enumeration, *Rhizobium japonicum*, *Rhizobium leguminosarum*,

nodulation, competition, *Pisum sativum*, *Glycine max* 2967.

inoculation, nitrogen-fixing bacteria, agroforestry 2910.

Malus pumila, soil microorganisms composition, phytotoxins toxicity 2146.

nitrogen-fixing bacteria isolates, nitrogenase activity, *Gramineae* 9014.

nitrogen-fixing bacteria, nitrogen fixation, soil moisture, salinity effects on,

crops 2980.

nitrogenase activity, nitrogen-fixing bacteria, environmental factors, pasture

9018.

Oryza sativa, isolation, *Pseudomonas*, *Alcaligenes*, *Aeromonas*, nitrogen fixation

5653.

Photorhizobium, antagonism, *Bacillus subtilis*, antibiotics production, oxafun

inhibition 2139.

plants, interaction, microorganisms, characterization, reviews 4627.

Pseudomonas inoculation, yield stimulation, *Parthenium argentatum* 8213.

Pseudomonas siderophores antagonism, phytopathogenic fungi, *Erwinia*, *Solanum*

tuberosum 2830.

response, relationship, *Bradyrhizobium japonicum*, nodulation, *Glycine max* 4641.

Saprolengnaceae, *Pythiaceae*, *Lycopersicon esculentum*, *Oryza sativa*, *Triticum*

Rhizosphere, (continued)

- vulgaris, *Pinum sativum* 8220.
soil composition, *Triticum aestivum*, *Oryza sativa*, manure effects on 2996.
Streptomyces, inhibition *Rhizobium*, nodules, rhizosphere 6378.
temperature, effects on, ectomycorrhizas, vesicular-arbuscular mycorrhizas formation, forests soil 5549.
ultrastructure, intercalation, roots, catalase, rhizosphere, *Oryza sativa* 8962.
- Rhizosphere microorganisms**
community composition, mixed culture, *Lolium perenne*, *Plantago lanceolata*, *Trifolium repens* 372.
cytokinins biosynthesis, pH effects on, *Pinus sylvestris* 8161.
dehydrogenase activity, redox potential, iron reduction, fertilizer applications effects on, *Oryza sativa* 7297.
fungi, *Adiantum capillus-veneris*, *Ceterach officinarum*, *Asplenium filare*, *Chelanthus catanensis* 8981.
interspecific relationships, pedogenesis 394.
nitrogen cycle, paddy fields, *Oryza sativa* 7284.
nitrogen fixation, insecticides inhibition, paddy fields 1283.
nitrogen-fixing bacteria, nitrogenase, vertical distribution, planting density, paddy fields, *Oryza sativa* 7281.
nutrient uptake, plants 5627.
organic acids, effects on clays dispersion, soil structure 5639.
organic matter composting, effects on *Sorghum vulgare* roots, soils (sandy), clays 2121.
phosphate-dissolving bacteria, symbiosis ultrastructure 8236.
phosphate-dissolving bacteria, phosphate dissolution, *Triticum aestivum*, *Lolium perenne* 7255.
respiration, *Urea* foliar applications effects on, *Triticum aestivum* 2946.
soil microorganisms, population levels, *Lycopersicon esculentum*, *Phaseolus vulgaris* 8990.
Triticum aestivum, *Hordeum vulgare*, carbon, utilization, release 2930.
vertical distribution, *Avena* 5646.
- Rhizoxin**
structure, *Rhizopus chinensis* 7112.
- Rhodamine**
staining, fluorescence, membrane potential, live bacteria 5025.
- Rhodanine**
derivatives, antifungal activity 4018.
- Rhodococcus**
distribution, incidence, pasture, nematocides effects on 7295.
- Rhodococcus australis**
perhydropendyl derivatives, production 7783.
- Rhodococcus corallinus**
6-chloro-N-ethyl-1,3,5-triazine-2,4-diamine, dechlorination, deamination, biodegradation 8691.
- Rhodococcus erythropolis**
biodegradation, aniline 2708.
pristane oxidation 4685.
trehalose dicyanomycolate biosynthesis intermediates 978.
- Rhodocrobium vannielii**
hydrogen production, use, organic acids, nitrogen sources association 1843.
- Rhodophyta**
marine environment, association, antibacterial activity, penicillinase inhibition, effects on, *Staphylococcus aureus*, *Escherichia coli* 8305.
- Rhodopseudomonas**
immobilized cells, hydrogen production 3559.
- Rhodopseudomonas acidophila**
alcohol dehydrogenase (NAD(P)⁺), purification, characterization, aromatic compounds biodegradation 7692.
dy-linked alcohol dehydrogenase, purification, characterization substrate specificity 1776.
- Rhodopseudomonas capsulata**
hydrogen gas production, temperature, light intensity *Rhodopseudomonas capsulata* 5219.
hydrogen production, use, organic acids, nitrogen sources association 1843.
hydrogenase, purification, characterization, membranes localization 2567.
NADH dehydrogenase, purification, characterization 5989.
- Rhodopseudomonas palustris**
nitrate reductase, purification, characterization 4318.
- Rhodopseudomonas sphaeroides**
cytochrome c1, purification, characterization 3406.
2-(1-hydroxyethyl)-2-desvinyl chlorophyllide a, isolation, characterization 6893.
iron reduction enzymatic activity, electrophoresis methodology 3347.
pions, characterization 5956.
- Rhodospirillaceae**
culture methodology 4214.
hydrogen production, use, organic acids, nitrogen sources association 1843.
storage, nitrogen (liquid), anaerobic conditions 4215.
- Rhodospirillum rubrum**
carbon monoxide dehydrogenase characterization 6860.
dinitrogenase reductase, inactivation, characterization 1774.
hydrogen production, use, organic acids, nitrogen sources association 1843.
hydrogen fixation regulation, nitrogenase, iron proteins modification 2611.
photosynthesis, reaction centers preparation methodology 2509.
ribulosebiphosphate carboxylase, X-ray diffraction 6001.
- Rhodospirillum toruloides**
rubeomycin B biosynthesis, rubeomycin A transformation 1415.
- Rhodotorula glutinis**
acid phosphatase activity 5123.
fatty acid composition, glycolipids, 3-methoxy octadecanoic acid 4382.
lipids production, association, nutrient utilization, growth rate 970.
lipids production, fatty acid composition, sterol composition 5217.
lipids production, nutrient requirements, nitrogen sources, carbon sources 1856.
phenylalanine ammonia lyase activity, induction, stabilization 37.
rubeomycin, immobilized enzymes, β -(sulfoethylsulfonyl) aniline cross-linkage 81.
rubeomycin B biosynthesis, rubeomycin A transformation 1415.
- Rhopalosiphum maidis**
chemical control, insecticides \pm fungicides, seed treatments, *Hordeum* 6317.
- Rhopalosiphum padi**
biological control, pathogenicity, field trials, Entomophthoraceae 5230.
- Rhycolia frustulana**
pest control, use, granulosis virus, *Cydia pomonella*, isolates 6892.
- Rhynchosia suaveolens**
biphenyls, derivatives, antibacterial activity, *Bacillus subtilis*, *Staphylococcus aureus* 9096.

Rhynchosporium oryzae

- disease resistance plant breeding, *Oryza sativa* 8896.
infection, *Oryza sativa*, leaves, histopathology 8793.
leaf scald, *Oryza sativa*, disease resistance 5504.
- Rhynchosporium secalis**
leaf blotch, barley yellow dwarf virus effects on disease resistance, *Hordeum vulgare* 1196.
phytoalexins, synthesis 1936.
scald disease, *Hordeum vulgare*, pure culture, biosynthesis, rhynchosporosides 3801.
scald, disease resistance, genetic variance, plant breeding, *Hordeum vulgare* 316.
triadimenol sensitivity 5530.
- Rhynchosporosides**
biosynthesis, pure culture, *Rhynchosporium secalis*, scald disease, *Hordeum vulgare* 3801.
- Rhynchospora salicinium**
infection, *Salix*, national parks, Iceland 7195.
- Ribamidle**
antiviral activity, herpes simplex virus 1 cell culture 4774.
- Ribautodelphax notabilis**
role, rhabdovirus transmission, Gramineae, Iran 262.
- Ribavirin**
antiviral activity, hemagglutinins biosynthesis, cell culture, influenza B virus 3822.
antiviral activity, potato virus Y, tobacco mosaic virus, cucumber mosaic virus, petioles tissue culture, *Nicotiana tabacum* 3904.
antiviral activity, tobacco mosaic virus, characterization 8332.
foliar applications, effects on cowpea chlorotic mottle virus infectivity, symptoms, *Vigna unguiculata* 3903.
foliar applications, effects on infection, *Prunus necrotic ringspot virus*, green ring mottle virus like particles, *Prunus* 3902.
+ α -interferon, +rimantidine hydrochloride, inhibition, replication, influenza A virus 3066.
radioimmunoassay 461.
synergism, selenazofurin, antiviral activity 9116.
synergism, tiazofurin, selenazofurin, antiviral activity, togavirus, bunyavirus, arenavirus 9117.
- Ribes**
plant viruses, Finland 6268.
- Ribgrass mosaic virus**
detection, paper enzyme immunoassay, *Brassica chinensis* 1147.
- Ribitol**
nutrient deficiency, chemostats, ribitol dehydrogenase, *Escherichia coli* 3444.
- Ribitol dehydrogenase**
biosynthesis, chemostats, mutants, *Escherichia coli* 6821.
chemostats, ribitol nutrient deficiency, *Escherichia coli* 3444.
production, *Escherichia coli* 3505.
- Riboflavin**
effects on, *Streptococcus mutans*, glucans, biosynthesis, enzymes 3157.
inhibition, *Streptococcus mutans*, glucans, biosynthesis 3155.
- 2- β -D-Ribofuranosylselenazole-4-carboxamide**
synergism, ribavirin, antiviral activity 9116.
- Ribonuclease**
characterization, fruit bodies, *Leptinus edodes* 1764.
purification, characterization, *Saccharomyces cerevisiae* 2826.
Rhodotorula glutinis, immobilized enzymes, β -(sulfoethylsulfonyl) aniline cross-linkage 81.
- Ribonuclease E**
purification, characterization, *Escherichia coli* 2569.
- Ribonuclease H**
purification, characterization, activity, *Saccharomyces cerevisiae* 886.
- Ribonuclease (pancreatic)**
kinetics, structure-activity relationships, substrate specificity, *Penicillium brevicompactum* 5152.
- Ribonuclease T2**
purification, characterization, *Aspergillus saitoi* 884.
- Ribonucleoproteins**
role, disease transmission, tobacco mosaic virus, characterization 8862.
- Ribonucleoside-diphosphate reductase**
2'-azido-2'-deoxynucleotides interaction, radicals, *Escherichia coli* 8556.
DNA biosynthesis, herpes simplex virus 1, vesicular stomatitis virus, antiviral activity, parabacit, bis-N1,N8-(2,3-dihydroxybenzoyl)spermidine 8335.
- Ribonucleosides**
metabolism, inosine production, mutants, *Brevibacterium ammoniagenes* 5207.
- Ribosomal protein L11**
structure, micrococin antibiotic resistance mutants, *Bacillus megaterium* 6432.
- Ribosomal protein L6**
crystal structure, X-ray diffraction, *Bacillus stearothermophilus* 7662.
- Ribosomal protein S1**
repeated sequence, role, translation, poly(U), poly(A), *Escherichia coli* 4258.
- Ribosomal proteins**
purification, high-performance liquid chromatography methodology, *Escherichia coli* 7660.
- Ribosomal subunit 50S**
crystals, electron microscopy, *Bacillus stearothermophilus* 874.
- Ribosomes**
antibacterial agents effects on, bacteria 9094.
antigens, *Neisseria gonorrhoeae*, passive hemagglutination, immunodiagnosis, gonorrhea, man 714.
association, *Streptococcus faecalis*, clinical isolates, antibiotic resistance, streptomycin 4637.
Cochliobolus heterostrophus, DNA, isolation methodology 3365.
Methanococcus vannielii, aminoglycoside antibiotics sensitivity 2237.
protein biosynthesis role, gene regulation, antibiotic resistance ermC gene, ermD gene, *Staphylococcus aureus*, *Bacillus licheniformis* 6427.
rRNA active sites, antibiotics effects on, reviews 1428.
tylosin binding, structure activity relationships, antibacterial activity 3172.
virgimycin binding, pH, ions effects on 8376.
- Ribostamycin**
antibiotic resistance, genes, cloning, *Streptomyces* 1314.
like antibiotics, synthesis 5790.
production, *Streptomyces ribosidificus*, mutants 3163.
- Riboxine**
biosynthesis, glucose, nitrogen, effects on, *Bacillus subtilis* 1411.
- Ribulosebiphosphate carboxylase**
activity, *Erysiphe graminis* f.sp.hordei, powdery mildew inhibition, *Hordeum*

Ribulosebiphosphate carboxylase, (continued)
vulgaris 5434.

mediation, carbon dioxide effects on nitrogenase, activity, Bradyrhizobium japonicum 7280.
X-ray diffraction, Rhodospirillum rubrum 6001.

Rice
aflatoxins biosynthesis, Aspergillus flavus, Aspergillus parasiticus, temperature effects on 3703.
post-harvest decay, fungal flora, ergosterol levels, indicators 2051.**Rice dwarf virus**,
disease resistance, plant breeding, Oryza sativa 7202.
Rice ragged stunt virus,
disease resistance, Oryza sativa varieties, Thailand 8100.

disease transmission, Nilaparvata lugens, Nilaparvata bakeri, Oryza sativa 4520.
Rice stripe necrosis virus,
Oryza sativa 7144.

Rice tungro virus,
disease control, vectors, Nephotettix virescens, chemical control, carbofuran, phorate, Oryza sativa 2072.
disease spread, Nephotettix, Oryza sativa 7153.
vectors, Nephotettix virescens, Cicadellidae, carbofuran formulations, Oryza sativa 6295.
vectors, Nephotettix virescens, pest control, Annona squamosa, Azadirachta indica, seeds oils, Oryza sativa 6299.**Ricinus communis**,
antifungal agents induction, Rhizopus stolonifer polygalacturonase role 297.
Rickettsia,
infection, Trifolium repens, pathogenesis, Canada 2778.

typhus, vaccines, purification 3179.
Rickettsia-like organisms,
antigens preparation, activity determination 4182.

DNA purification, deoxyribonuclease treatment, chick embryos yolk sac 5033.
Rickettsia rickettsii,
Rocky Mountain spotted fever, immunodiagnosis, enzyme-linked immunosorbent assay,

fluorescent antibody test 2471.
Rocky Mountain spotted fever, vaccines, immunogenicity, efficacy 2326.
Rickettsia-like organisms,
etiology, little leaf, Wissadula periplochia, Jamaica, new records 2046.

little leaf disease transmission, treatment, Wissadula periplochia, Jamaica 6247.
plant diseases 3771.
rosette, Beta vulgaris, etiology 3845.

Rifampicin,
+amphotericin B +antifungal agents, antifungal activity, Aspergillus 5785.
+ampicillin, +chloramphenicol, antibiotic synergism, antibacterial activity, Haemophilus influenzae type b 9166.
antibacterial activity, Staphylococcus aureus, Staphylococcus epidermidis, Streptococcus faecalis 4815.
antibacterial activity, Staphylococcus aureus, ultrastructure, growth 7448.
antibacterial activity, Streptococcus viridans 6544.
antibiotic resistance, Escherichia coli, isolation, chickens 3032.
antibiotic sensitivity testing, Neisseria gonorrhoeae 4804.
antibiotic sensitivity testing, Streptococcus faecalis 4808.
antibiotic sensitivity testing, Streptococcus pneumoniae 6503.
+carbenicillin, +gentamicin, +cotrimoxazole, antibiotic synergism, antibacterial activity, Pseudomonas maltophilia 3091.
drug resistance, Mycobacterium tuberculosis, clinical isolates, USA, Texas 6422.
drug sensitivity testing, drug resistance, Mycobacterium tuberculosis 6443.
drug sensitivity testing, Mycobacterium leprae 4855.
effects on Bacillus subtilis, sporulation, stringent response 2242.
± pyrazinamide, antibacterial activity, Mycobacterium, nephelometry 7354.
resistance mutation, Rhizobium japonicum, relationship, symbiosis nitrogen fixation 2962.
resistance, Mycobacterium tuberculosis, biological properties 7319.
resistance, rifampicin +tobramycin, antibacterial activity 8357.
vancomycin, antibiotic synergism, antibiotic sensitivity testing, bactericidal activity, Staphylococcus aureus 7413.

antibacterial activity 7447.
drug sensitivity testing, Mycobacterium tuberculosis, radiometry 3051.

Rifamycin,
+amphotericin B, antifungal activity, experimental infection, candidiasis, guinea-pigs 8365.
antibacterial activity 7446.
antibacterial activity, antibiotic resistance, bacteria 7340.
antibacterial activity, Chlamydia trachomatis 8360.
antibacterial activity, conferences 7650.
antibacterial activity, Listeria monocytogenes 8362.
antibacterial activity, Streptococcus group B 8361.
antifungal activity, Aspergillus, Histoplasma capsulatum, Saccharomyces cerevisiae 8363.
antifungal activity, Candida albicans 8364.
antifungal activity, rifandin, effects on RNA polymerase (DNA-dependent), bacteria 8358.
leukocytes interaction, phagocytosis, Staphylococcus aureus 7450.
+oxacillin, antibacterial activity, Staphylococcus aureus 8356.
production, immobilized cells, Humicola 4054.
structure 5781.
transport, phagocytes, antibacterial activity, Staphylococcus 7449.
Rifamycin oxides,
activity, immobilized cells, Humicola 5083.
activity, rifamycin production, immobilized cells, Humicola 4054.**Rifamycins**,
Monocillium, isolation, transformation, characterization 2248.**Rifandin**,
RNA polymerase (DNA-dependent), effects on, bacteria 8358.**Rigidoporus lignosus**,
root rot, disease spread, host-pathogen interactions, kinetics, Hevea brasiliensis 5604.
root rot, Hevea brasiliensis, pathogenesis 2920.**Rimantidine hydrochloride**,
+α-interferon, +ribavirin, inhibition, replication, influenza A virus 3066.**Rinderpest virus**,
antigens detection, complement fixation methodology 3257.
live vaccines production, tissue culture methodology 3181.**Ring rot**,
bacteria, disease resistance, Solanum tuberosum 4559.**Ring rot, (continued)**

Corynebacterium sepedonicum, identification, agglutination, immunodiffusion, diagnosis, Solanum tuberosum 8466.
Corynebacterium sepedonicum, light intensity effects on, Solanum tuberosum 7998.
Corynebacterium sepedonicum, media (culture), culture aging effects on pathogenicity, Solanum tuberosum 7999.

Ring spot,

Lycopersicon esculentum, etiology, tomato mosaic virus strains, USA, California 8842.

Ripening,

Camembert cheese, aroma compounds, surfaces microflora, interaction, Penicillium camemberti 6186.
cheddar cheese, stimulation, Streptococcus cremoris, intracellular proteinase 193.
cheese, cheese flavor, stimulation, triacylglycerol lipase, proteinase, fungi 7860.
fruits, antifungal compounds, Colletotrichum gloeosporioides infection, Persea americana 2000.

Ritalomycin A,

physicochemical properties 7454.

Rivers,

antibiotic resistance, Enterobacteriaceae, Bangladesh 4133.
aquatic microorganisms, biodegradation assays, chemical pollution 2329.
aquatic microorganisms, biodegradation, o-phenylphenol 7636.
chemical pollution, monochlorobiphenyls, biphenyl, biodegradation 185.
Escherichia, indicator species, population levels, water temperature 4131.
fresh water, Aeromonas salmonicida survival, role disease transmission, furunculosis, Salmonella 4937.
heterotrophic microorganisms slimes, heavy metals concentration, Eire 6716.
microbial pollution, Aves, fecal coliforms, Canada 1502.
microbial pollution, Salmonella 4129.
pollution monitoring, fecal coliforms most probable number 1495.
surface water, water quality, viruses 9254.
USA, Wyoming, oil and gas industry effluents effects on microorganisms, biodegradation 9038.
viruses microbial pollution, Romania 2406.
waste water, microorganisms, biodegradation, dissolved oxygen, organic matter, biochemical oxygen demand, biomass, ATP 1454.
water exposure, titanium surfaces, microorganisms colonization 3650.
water pollution, fecal coliforms, Brazil 7535.
water pollution, viruses, Japan 8423.
water quality, pollution monitoring, indicator species, Clostridium perfringens 5855.

RNA,

characterization, beet western yellows virus, isolates, Capsella bursa-pastoris 8668.
citrus exocortis viroid infected Gynura aurantiaca, separation techniques, DNA, use, ethanol 3248.
citrus exocortis viroid, precipitation, use, cations 3247.
detection, diagnosis, rotavirus (human) infection, methodology 2446.
double stranded, bluecotton virus genomes, analysis methodology 4148.
double-stranded, barley yellow dwarf virus infection, Avena byzantina 260.
double-stranded, killer factor, virulence, biological control, Endothia parasitica, blight, Castanea dentata 8638.
double-stranded, viruses, role virulence, Entomophthora egressa, biological control, Christoneura 8634.
elimination, Endothia parasitica virulence conversion, Castanea sativa blight biological control 6328.
levels, leaves, Pycnarura oryzae, blast, Oryza sativa 7978.
plant viruses, replication, actinomycin D sensitivity, Vigna unguiculata leaves infection 7931.
purification methodology, Streptomyces coelicolor 8472.
+sodium, media (isolation), Shigella 9326.
temperature association, batch culture, Saccharomyces cerevisiae 799.
tobacco mosaic virus, detection, hybridization analysis, enzyme-linked immunosorbent assay, plants, tissues, protoplasts 4499.
tomato bushy stunt virus, cleavage, infectivity, Lycopersicon esculentum 2013.
tump rosette virus, replication, Brassica rapa protoplasts 2045.
viruses, pyrazofurin, antiviral activity 4020.
viruses, silver staining, methodology 654.
yeasts, isolation methodology, use, Oerskovia xanthineolytica lyticase, sodium dodecyl sulfate 8492.

RNA biosynthesis,

antifungal activity, metalaxyl, Phytophthora parasitica var. nicotianae 8135.
inhibition, antibacterial activity, myxopyronin 3130.
marine microorganisms, measuring techniques, methodology 4143.
tobacco mosaic virus, inhibition, 2-(α-hydroxybenzyl)benzimidazole, disease control, Nicotiana tabacum 7216.

RNA polymerase,

bacteria, phages, isolation, kinetics, substrate specificity 59.
purification, Streptomyces griseoflavus 4327.

RNA polymerase (DNA-dependent),

isolation, Mycoplasma 923.
rifandin effects on, bacteria 8358.

RNA polymerase III,

DNA binding, chromatography, ionic strength effects on, yeasts 7704.

RNA polymerase (RNA-dependent),

activity, cowpea chlorotic mottle virus infection Vigna sinensis 4508.

mRNA,

tobacco mosaic virus coat protein, characterization, Nicotiana tabacum mesophyll protoplasts 286.

rRNA,

active sites, antibiotics effects on, ribosomes, reviews 1428.
comparison methodology, Clostridium 2513.

rRNA 18S,

levels, threo-1-phenyl-2-nitro-1,3-diaetoxy-propane effects on, Fusarium oxysporum 8921.

rRNA 28S,

levels, threo-1-phenyl-2-nitro-1,3-diaetoxy-propane effects on, Fusarium oxysporum 8921.

IRNA,

yeasts mitochondria, characterization, use, gels electrophoresis, methodology 3362.

Robinia,
bark, nitrogen-fixing bacteria activity 8147.

Robinia pseudacacia,
stem rot, Phytophthora cinnamomi, new records, China, People's Rep. 369.

Rochalmæa quintana,
antibiotic sensitivity testing, characterization 6495.

Rocks,
petroleum recovery, phase T4D lysis, contamination, Escherichia coli 3986.

Rocky Mountain spotted fever,
immunodiagnosis, enzyme-linked immunosorbent assay, fluorescent antibody test 2471.

vacines, immunogenicity, efficacy, Rickettsia rickettsi 2326.

Rodentia,
disease transmission, public health, solid wastes, bacteria, fungi, viruses 2361.

Roffmlycoln,
bacteriosis, Streptomyces maghwi sp.nov., taxonomy 2314.

Romania,
rivers, viruses microbial pollution 2406.

swimming pools, enterovirus microbial pollution, comparison, bacteria indicator species 2409.

Root hairs,
Alnus rubra, actinorrhizas, Frankia 4599.

Glycine soja, cloning DNA sequence, Bradyrhizobium japonicum, Pseudomonas putida 6365.

infection, role capsules polysaccharides, Rhizobium japonicum, nodulation, Glycine max 2970.

Symbiosis, Lotus bainesii, host plants, Rhizobium leguminosarum, Bradyrhizobium japonicum, role lectins 6382.

Root rot,
Allium cepa, Fusarium solani toxins 2028.

Aphanomyces eutiches, disease resistance, Pisum sativum, plant breeding 2852.

Armilaria mellea, Coniferates, susceptibility, relationship, soil nutrients, pH 2919.

Cicr arietinum, incidence, Rhizoctonia bataticola inoculum, mycelia, sclerotia, soil 1976.

Cochliobolus sive, Hordeum vulgare yield components 5428.

Cylinodrocladium crotalariae, disease resistance, plant breeding, Arachis hypogaea 7942.

Cylinodrocladium crotalariae, factors affecting, pathogenesis, Arachis hypogaea 7942.

Dematophora necatrix, horticulture crops disease resistance 2073.

disease control, forest management, Canada 2922.

disease control, soil amendment, sawdust, oil cake, Triticum aestivum 8088.

disease resistance, inheritance, Triticum 2885.

Fusarium oxysporum, Pinus leaves chemical composition association 2116.

Fusarium avenaceum, disease control, soil pasteurization, Trifolium subterraneum 6301.

Fusarium, disease resistance, plant breeding, selection, Trifolium pratense 6292.

Fusarium oxysporum, biological control, Laccaria laccata, ectomycorrhizas, aromatic compounds, Pseudotsuga menziesii 5562.

Fusarium solani f.sp.pisi, Pisum sativum, disease control, use, Trichoderma viride+fungicides 338.

Gaeumannomyces graminis var.tritici, pathogenesis, triticum aestivum 3809.

Gibberella zeae, effects on carboxylan translocation, Zea mays 259.

Gossypium hirsutum, disease control, ammonia, Phymatocotum omnivorum 5523.

Gramineae, fungi, biodegradation, litter paper 1001.

Hevea brasiliensis, pathogenesis 2920.

Phaseolus vulgaris, Pythium etiology, USA, Wisconsin 7939.

Phaseolus vulgaris, Pythium, Fusarium, effects on N-(phosphonomethyl)glycine activity 7943.

Phymatocotum omnivorum, Gossypium hirsutum, disease control, soil temperature+water potential 8099.

Phymatocotum, pathogenesis, Gossypium hirsutum, Gossypium barbadense 6280.

phytopathogenic fungi, pasture, Medicago 6233.

phytopathogenic fungi, Zea mays, etiology 7952.

Phytophthora capsici, disease resistance, plant breeding, Capsicum annuum, Capsicum frutescens 8094.

Phytophthora, Castanea sativa disease control 3876.

Phytophthora cinnamomi, Abies fraseri, flooded soils effects on pathogenesis 5610.

Phytophthora cinnamomi, disease control, metalaxyl, fosfite-Al, injection, Persea americana 8125.

Phytophthora cinnamomi, Eucalyptus sieberi, soil types 5584.

Phytophthora cinnamomi, Phytophthora parasitica, biological control, Catenaria angulilata parasitism, Citrus, Persea 5515.

Phytophthora cryptogea, disease resistance, plant breeding, Carthamus tinctorius 6296.

Phytophthora cryptogea, disease resistance, screening, environmental factors, Carthamus tinctorius 7970.

Phytophthora, disease control, metalaxyl, silviculture, seedlings, Pseudotsuga menziesii 8927.

Phytophthora, Glycine max, biological control, Hypochytrium catenoides 5510.

Phytophthora megasperma, Brassica oleracea var.capitata, Brassica oleracea var.botrytis, USA, Oregon 5468.

Phytophthora megasperma, disease control, metalaxyl, Brassica oleracea 1225.

Phytophthora megasperma f.sp.glycinea, virulence, Glycine max, USA, New York 8776.

Phytophthora nicotianae f.sp.nicotianae, disease resistance inheritance, Lycopersicon 296.

Phytophthora, orchards, Juglans regia 271.

Phytophthora parasitica, Lycopersicon esculentum, disease control, metalaxyl, sulfadoxine 5532.

Phytophthora pseudotsugae, Pseudotsuga menziesii, etiology, pathogenesis 3909.

Pythium, Fusarium, soils (sandy), Zea mays 1998.

Pythium myriophyllum, disease control, gibberellins, foliar application, Arachis hypogaea 322.

Pythium ultimum, Beta vulgaris, Laetisaria arvalis biological control 323.

Rhizoctonia bataticola, Cicr arietinum, phenols levels 1975.

Rhizoctonia bataticola infection screening, Cicr arietinum 1980.

Rhizoctonia solani, disease control, 1-methylpyrazole carboxanilides, structure-activity relationships, Gossypium hirsutum 5531.

Rhizoctonia solani, Fusarium oxysporum, Pythium ananidematum, Cylinodrocarpon, disease control, benomyl, PCNB, Ficus benjamina 8916.

Rhizoctonia solani, Phaseolus vulgaris, herbicides effects on 1181.

Rigidoporus lignosus, disease spread, host-pathogen interactions, kinetics, Hevea brasiliensis 5604.

Root rot, (continued)
Sclerotium rolfsii, Eucalyptus, incidence, greenhouses 8942.

Xanthosoma sagittifolium, etiology, pathogenesis, Pythium myriophyllum 8844.

Zea mays, role, Phialophora zeicola sp.nov., South Africa 264.

Roots,
age, Rhizobium japonicum inoculation, dose-response effects, nodulation, Glycine max 2166.

Allium porrum, growth models, symbiosis, Glomus mosseae 3934.

Alnus glutinosa, Frankia actinorrhizas 2096.

Alnus rubra, nodules, Frankia nitrogenase activity 6318.

Areca catechu, Ganoderma lucidum infection, detection methodology, fluorescent antibody test 7160.

Beta vulgaris, plant diseases, plant viruses, vectors, Polymyxa betae, British Isles 1904.

biomass, Helminthosporium maydis phytochemicals, susceptibility, genes, Zea mays 8754.

cassava, fermenters, Aspergillus fumigatus, single-cell protein production 1709.

catatale, ultrastructure, interaction, sulfur bacteria, rhizosphere, Oryza sativa 8962.

Citrus incanus subsp.incanus, growth, ectomycorrhizas, Tuber melanosporum 3940.

Cocos nucifera, infection, Phytophthora palmivora 5445.

colonization, competition, endomycorrhizas inoculation, plants 5568.

colonization, ectomycorrhizas, inhibition, heavy metals, Picea sitchensis 8168.

colonization, ectomycorrhizas inoculation, succession, spatial distribution, soil, seedlings, Betula 5558.

colonization, ectomycorrhizas, inoculum potential, competition, trees 5563.

colonization, mathematical models, ectomycorrhizas, forestry 5577.

colonization, saprophytes, fungi, soil amendment, species composition, fungi soil, mines 8230.

colonization, vesicular-arbuscular mycorrhizas, Malus domestica 8218.

colonization, vesicular-arbuscular mycorrhizas, population levels, plantations, Coffea arabica 5626.

colonization, vesicular-arbuscular mycorrhizas, soil pH, calcium oxide soil amendment effects on, Zea mays 5629.

Coniferates, Pisolithus tinctorius spores inoculation, seedlings survival 5607.

crops, nitrogen fixation, denitrification, flooded soils 2994.

density, colonization, vesicular-arbuscular mycorrhizas, Trifolium subterraneum, Coffea arabica 8217.

density, effects on, Fusarium solani f.sp.phaseoli, infection, Phaseolus vulgaris 3782.

density, inhibition vesicular-arbuscular mycorrhizas growth stimulation, Allium cepa 5643.

ectomycorrhizas colonization, environment factors, trees 5551.

ectomycorrhizas colonization, spreading, nutrient transport, Pinus sylvestris 5573.

ectomycorrhizas colonization, water temperature, immersion, seedlings, Pinus radiata 7219.

Eucalyptus marginata, Eucalyptus calophylla, temperature, effects on, Phytophthora cinnamomi, infection 3912.

Eucalyptus, Phytophthora cinnamomi infection, water relations 5605.

exudates spore germination, Homobasidiomycetes, ectomycorrhizas 2130.

exudates, terpenoids, disease resistance, Fusarium oxysporum f.sp.vasinfecum, wilt, Gossypium hirsutum 8883.

formation, propagation, auxin+ectomycorrhizas effects on, Pinus pinaster 5929.

Gigaspora margarita colonization, sporulation, pure culture, Lycopersicon esculentum 8481.

Glycine max, Bradyrhizobium japonicum nodulation, penicillin sensitivity 5585.

Gramineae, incidence, Gaeumannomyces graminis, Phialophora radicola 2786.

growth rate, models, infection, vesicular-arbuscular mycorrhizas, Trifolium subterraneum 3933.

growth, seedlings, stimulation, inoculation, Pisolithus tinctorius, Lycopersicon esculentum, Pinus laeda 3908.

growth, Solanum tuberosum, plant diseases, Verticillium dahliae 5460.

growth, stimulation, ectomycorrhizas colonization, Pinus resinosa 5561.

growth stimulation, seed treatments, Agrobacterium radiobacter polysaccharides, Beta vulgaris 2891.

Helicotylenchus digonicus parasitism, interspecific relationships, mycorrhizas, Lycopersicon esculentum, Pinus excelsa 348.

Heterobasidion anisum assays, media (selective) 2111.

host-pathogen interactions, agricultural practices, phytopathogenic fungi, Triticum aestivum 3807.

infection, Armilaria mellea, decline, Picea rubens 8948.

infection, nodulation, Rhizobium, genetic analysis, Leguminosae 2974.

infection, Rhizobium, role polysaccharides, oligosaccharides, Leguminosae 2633.

Leguminosae, respiration, nitrogen fixation, Rhizobium 2957.

levels, gibberellins, Bradyrhizobium japonicum nodulation, nitrogen fixation, Glycine max 8242.

live, soil microorganisms biodegradation, Pinus resinosa, Acor saccharum, Quercus borealis 6322.

Lolium perenne, fungi incidence, nitrogen, phosphorus effects on 6340.

Lycopersicon esculentum, brown rot, Pyrenochaeta lycopersici isolation, identification 7176.

Malus pumila, distribution, tomato ringspot virus 7994.

Medicago sativa, Rhizobium meliloti localization attraction 6380.

meristems development, inhibition, Pozziella ericae, mycorrhizas, Calluna vulgaris 5560.

necrosis, Citrus sinensis, Citrus jambhiri, association, blight, Fusarium isolation 1136.

necrosis, Cronomeella xenopax disease control, dibromochloropropane effects on, orchards, Prunus persica 7164.

necrosis, Fusarium, Pythium, dibromochloropropane effects on, disease control, Cronomeella xenopax, orchards, Prunus persica 7164.

Nicotiana tabacum, tissue culture, Agrobacterium rhizogenes transformation, effects on susceptibility, infection, tobacco mosaic virus, potato virus Y 8076.

nutrient flow, carbon sources, phosphate, mycelia, vesicular-arbuscular mycorrhizas, Acor pseudoplatanus 5555.

oils, Orchidaceae, antimicrobial activity, bacteria, phytopathogenic fungi 4779.

Oryza sativa, nitrogenase activity, diurnal variation, seasonal variations 5674.

Persea americana, detection, Phytophthora cinnamomi, media (selective) 5932.

Phaseolus vulgaris, Rhizobium leguminosarum var.phaseoli inoculation, growth flowering 4506.

Pinus sylvestris, Armilaria mellea infection, fertilizer applications effects on 2923.

Pisum sativum, nodules proteins, Rhizobium leguminosarum interaction 4644.

plant diseases, pathogens, +Cronarium nicotiana blister rust, association, Dendroctonus ponderosae, Phytoecetes flossifrons, Pinus monticola, USA, Idaho 8182.

Roots, (continued)

- plant diseases, *Persea americana*, metalaxyl, efosite-AI, antifungal activity, *Phytophthora cinnamomi* 8923.
- plants, *Bradyrhizobium japonicum* attachment mechanisms, capsules polysaccharides 7275
- plants, ectomycorrhizas symbiosis, measuring techniques, reviews 832.
- plants, mycorrhizas, reviews 5647.
- plants, pathogens, fungi, interaction, ectomycorrhizas, reviews 393.
- plants, vesicular-arbuscular mycorrhizas infection, statistical analysis 1254.
- plants, vesicular-arbuscular mycorrhizas, measuring techniques, reviews 825.
- Pseudotsuga menziesii*, biomass, mycorrhizas association 3945.
- respiration (cyanide insensitive), protons pumps, *Ipex pachyodon*, methyl-acetylthioacetate effects on, *Triticum aestivum* 8745.
- Saccharum officinale*, Pythium isolation, media (selective) 1993.
- seedlings, ectomycorrhizas colonization, culture systems, *Pinus* 7637.
- Sorghum vulgare*, soils (sandy), clays, trichosphere microorganisms, organic matter composing effects on 2121.
- Troglum repens*, *Glomus fasciculatum* hyphae ultrastructure 381.
- Trifolium repens*, ultrastructure, hyphae, *Glomus fasciculatum* 8226.
- Trifolium subterraneum*, *Heterodera daveri* penetration, *Fusarium avenaceum* filtrates effects on 5524.
- Triticum aestivum*, susceptibility, *Pseudomonas* plant diseases 6242.
- vesicular-arbuscular mycorrhizas colonization, fruit trees 5619.
- vesicular-arbuscular mycorrhizas colonization, phosphate, nutrient uptake, physiology, trees 5554.
- vesicular-arbuscular mycorrhizas colonization, phosphate, nutrient uptake, crops 5620.
- vesicular-arbuscular mycorrhizas colonization, seasonal variations, environmental factors, *Atriplex gardneri*, deserts 385.
- +vesicular-arbuscular mycorrhizas, comparison, vesicular-arbuscular mycorrhizas vesicles, use, inoculum 2153.
- vesicular-arbuscular mycorrhizas infection, Malaysia, Leguminosae 8164.
- Zea mays*, colonization, bacteria, interspecific relationships, bioassays 4639.
- Rootstocks.**
- Agrobacterium tumefaciens* serotyping, crown gall, *Malus pumila* 270.
- crown gall, disease control, streptomycin, CGA 78039, *Malus pumila* 342.
- disease resistance, disease control, *Ceratostyis limbrata*, wilt, Brazil, *Mangifera indica* 5440.
- hybrids, *Prunus domestica* × *Prunus persica*, *Prunus domestica* × *Prunus cerasifera*, susceptibility, tomato ringspot virus infection 4528.
- Rosiciformis**, biosynthesis, *Penicillium* 7888.
- Roridin A**, isolation, characterization, *Phomopsis* 7896.
- Rosae**, crown gall, biological control, *Agrobacterium radiobacter*, reviews 333.
- cultivars, *Sphaerotheca pannosa* var *rosae* races, isolation, virulence 2807.
- plant breeding, disease resistance, *Sphaerotheca pannosa* mildew, *Diplocarpon rosae* black spot 8096.
- plant diseases, books 1686.
- Rosae belgium**, plant diseases, *Erwinia amylovora* 5461.
- Rosa corymbifera**, rose mosaic disease, apple mosaic virus, *prunus necrotic ringspot virus* 8820.
- Rosa multiflora**, plant breeding, seedlings, growth, *Sphaerotheca pannosa*, powdery mildew disease resistance 8904.
- Sphaerotheca pannosa* var *rosae* races, isolation, virulence 2807.
- Rosa rugosa**, *Sphaerotheca pannosa* var *rosae* races, isolation, virulence 2807.
- Rosamicin**, deoxygenation, products antibacterial activity 5789.
- Rosaramicin**, antibiotic sensitivity testing, *Streptococcus faecalis* 4808.
- Rose mosaic disease**, apple mosaic virus, *prunus necrotic ringspot virus*, *Rosa corymbifera* 8820.
- Roseofungin**, antiviral activity, influenza virus 6485.
- Roseotoxin B**, secondary structure, hydrogen bonding role, *Trichothecium roseum* 8756.
- X-ray diffraction, crystal structure, N.M.R., *Trichothecium roseum* 8755.
- Rosette**, *Beta vulgaris*, etiology, rickettsia-like organisms 3845.
- Calendula officinalis*, viruses infection 4547.
- Rot**, *Abies pinsapo*, *Aphyllorhales* fruit bodies 5611.
- Botrytis allii*, disease resistance, plant breeding, *Allium cepa* 5479.
- Colletotrichum gloeosporioides*, *Vitis rotundifolia*, pathogenesis, disease control 8006.
- Coccisia antiquorum*, phytopathogenic fungi, etiology, pathogenesis 8010.
- Cylindrocapsa*, *Phaeosorus aureus* 5409.
- Dionex regia, epidemiology, *Phellinus noxius* 5590.
- Erwinia chrysanthemi*, *Dieterbachia maculata* 5447.
- Phytophthora megasperma* f.sp.glycinea, disease resistance, Rps1 gene, linkage, metribuzin resistance, Hm gene, *Glycine* max 2064.
- Phytophthora megasperma* f.sp.glycinea, disease tolerance selection, plant breeding, *Glycine* max 8078.
- Phytophthora megasperma* f.sp.glycinea, disease tolerance heritability, plant breeding, *Glycine* max 8085.
- Phytophthora megasperma* f.sp.glycinea, disease tolerance, *Glycine* max 8086.
- Phytophthora parasitica* var *pisiparia*, biological control, fungi extracts, *Piper betle* 5518.
- Rhizoctonia solani*, disease control, agricultural practices comparison fungicides, *Phaeosorus vulgaris* 1210.
- Solanum tuberosum*, *Phytophthora parasitica*, *Phytophthora cryptogea*, pathogenesis, USA, Texas 1155.
- Rotating discs**, microorganisms, wastewater treatment, industrial effluents, dairy industry 6697.
- oxygen transfer, temperature effects on, wastewater treatment 1471.
- wastewater treatment 2344.
- wastewater treatment, denitrification, films pH 2356.
- wastewater treatment, industrial effluents, fungi 2341.
- wastewater treatment, nitrification, mathematical models 2355.
- wastewater treatment, nitrogen removal, fertilizers, industrial effluents, *Stichococcus bacillaris*+denitrifying bacteria 9236.
- wastewater treatment, oxygen transfer 2347.

Rotating discs, (continued)

- wastewater treatment, reviews, bibliographies 4904.
- Rotavirus**, antigens, genes cloning, vaccines production 6643.
- detection, comparison, counter immunoelectrophoresis, enzyme immunoassay, electron microscopy 4980.
- detection, enzyme immunoassay comparison immunoelectron microscopy 611.
- detection, feces, cattle electron microscopy comparison enzyme-linked immunosorbent assay 8434.
- detection, immunoperoxidase test methodology, cell culture 6734.
- detection, methodology comparison, enzyme immunoassay, ultracentrifugation+electron microscopy 1558.
- disinfection, peracetic acid, sewage effluents 6695.
- enzyme-linked immunosorbent assay, immunodiagnosis, false-positives 8438.
- feces, detection, immunoelectron microscopy methodology, association gastroenteritis, neonates, man 3252.
- isolation, *Callinectes sapidus*, concentration, methodology 2431.
- levels, detection methodology, surface water, drinking water, reviews 2384.
- levels, sewage, seasonal variations 4897.
- microbial pollution, drinking water, lakes, Mexico 7526.
- recombinants, vaccines production 6599.
- serotyping, immunoelectron microscopy 4986.
- survival, waste water, public health 1459.
- ultrafiltration isolation, water reclamation 2396.
- vaccines production, genetic engineering, immunoprophylaxis 6595.
- Rotavirus (bovine)**, antiviral activity, ammonium-5-tungsto-2-antimonate 6471.
- plaque assay 6735.
- vaccines, immunogenicity, animal models 3177.
- Rotavirus (human)**, antigens detection, immunoassays solid-phase methods, feces, children 4169.
- detection, enzyme-linked immunosorbent assay methodology, feces, neonates, man 2444.
- detection, feces, electron microscopy, comparison, Rotazyme 3239.
- detection, feces, enzyme-linked immunosorbent assay, electron microscopy, passive hemagglutination 1552.
- detection, feces, use, enzyme-linked immunosorbent assay, comparison, electron microscopy, immunoelectron microscopy 3236.
- detection methodology comparison, feces, man 641.
- disinfectants, antiseptics, antiviral activity 2232.
- immunoglobulin G serum levels, enzyme-linked immunosorbent assay, statistical analysis, man 4166.
- incidence, enzyme-linked immunosorbent assay, gastroenteritis, children, Venezuela 4165.
- infection, diagnosis, detection, RNA, methodology 2446.
- isolation methodology, monkeys kidney cell culture 3233.
- isolation, monkeys kidney cells 1560.
- radioimmunoassay 3243.
- Rotavirus (simian) SA11**, detection, seawater, adsorption, methodology 4954.
- inactivation, chlorine, chlorine dioxide, monochloramine 8324.
- removal, resins adsorption, drinking water 1496.
- survival, drinking water, water-borne diseases 7538.
- (5R,6,8R)-6a-Hydroxyethyl-2-carbamoyloxymethyl-2-penem-3-carboxylate, antibacterial activity, synthesis 534.
- Rubber**, polymers, biodegradation, fungi 3646.
- Rubella**, immune status determination methodology, man 1569.
- pregnancy, man, rubella virus immunoglobulin M detection methodology 5878.
- seroepidemiology, serological tests comparison, surveys, man 4978.
- Rubella virus**, antibodies, detection, hemagglutination inhibition 616.
- antibodies, detection, immunofluorescence, immunoassays, methodology 637.
- antibodies detection, latex agglutination methodology, serum, man 1535.
- antibodies detection, latex agglutination, methodology comparison 1540.
- antibodies screening, hemolysis assays, man 6745.
- antiviral agents antiviral activity, cell culture 4770.
- attenuation, temperature effects on, use live vaccines, cell culture 7485.
- detection, enzyme-linked immunosorbent assay, comparison, hemagglutination inhibition, man 5016.
- hemolysis immunoassays, infection diagnosis, man, immune status 600.
- immune status, characterization, latex agglutination, man, methodology 635.
- immunoglobulin M detection, monoclonal antibodies use, immunoassay, man 644.
- immunoglobulin M, serum levels, enzyme-linked immunosorbent assay, man 618.
- membrane proteins, liposomes incorporation, vaccines, immunogenicity, rabbits 6650.
- rubella, immune status determination methodology, man 1569.
- rubella, pregnancy, man, immunoglobulin M detection methodology 5878.
- rubella, seroepidemiology, serological tests comparison, surveys, man 4978.
- specificity, immunoglobulin M detection, enzyme-linked immunosorbent assay methodology 8446.
- specificity, immunoglobulin M, serum ultracentrifugation, man 591.
- Rubeomycin A**, yeasts, transformation, rubeomycin B biosynthesis 1415.
- Rubeomycin B**, yeasts, biosynthesis, rubeomycin A transformation 1415.
- Rubeomycins**, structure 4372.
- Rubomycin**, interaction, DNA, fluorescence analysis 6066.
- Rubrotoxin B**, detection, animals feeds, use, thin-layer chromatography, methodology, factors affecting 7054.
- Rubromycin**, antibiotics production, *Actinodadura recticatenata* sp.nov. 4060.
- Rubus**, cancer, phytopathogenic fungi, USA, Ohio 8848.
- crown gall, disease control, sewage sludge, soil amendment 310.
- Didymella applanata* infection, phenols levels 5454.
- stem canker, *Botryosphaeria dothidea* 8841.
- viruses disease transmission, reviews 8004.
- Rubus allegheniensis**, hosts, tobacco ringspot virus, tomato ringspot virus 3818.

- Rubus ellipticus**, nodules ultrastructure, Frankia, actinorrhizas 8150.
- Rubus idaeus**, disease resistance, *Didymella applanata*, *Botrytis cinerea*, inheritance, plant breeding 3869.
- infection barriers, *Botrytis cinerea*, *Didymella applanata*, histology 8015.
- plant viruses, North America 6256.
- Rubus ulmifolius**, rust, *Phragmidium violaceum*, Australia 8012.
- Rudbeckia**, *bidens* mottle virus infection susceptibility 3625.
- Rumen**, anaerobic bacteria, enumeration, inhibition, reducing agents, titanium citrate, media (culture) 9301.
- cellulolytic bacteria, digestibility, feeds, turmps + straw, cattle 1920.
- microorganisms, *Digitaria pentzii* cell walls degradation 4428.
- Rumen microorganisms**, cattle, organic acids fermentation 1919.
- cellulolytic enzymes activity, lignocelluloses, ozone pretreatment 3459.
- continuous culture, fermentation, liquids dilution rates, pH 5295.
- growth, fermentation, chetomin, effects on 2315.
- plants cell walls digestion, reviews 3659.
- straw biodegradation, chemical composition association 2695.
- Rumex acetosella**, hosts, tobacco ringspot virus, tomato ringspot virus 3818.
- Ruminantia**, digestibility, *Anthrobacter*, biodegradation, lignocelluloses, effects on 7882.
- Ruminococcus albus**, α -L-arabinofuranosidase, purification, physicochemical properties, role, hydrolysis, cell walls 5121.
- enzymes, solubilization, cell walls, *Medicago sativa* 5117.
- growth, fermentation, chetomin, effects on 2315.
- Ruminococcus flavefaciens**, rumen microorganisms, *Digitaria pentzii* cell walls degradation 4428.
- Rumohra adiantiformis**, isolation, *Cylindrocylindrium* 5467.
- post-harvest decay, *Cylindrocylindrium heptaseptatum*, *Cylindrocylindrium pteridis*, prevention, benomyl, cold storage 8128.
- Rural environments**, rural populations, use, biomass, production, microorganisms, conversion, wastes, organic matter, books 6794.
- Rural populations**, rural environments, use, biomass, production, microorganisms, conversion, wastes, organic matter, books 6794.
- Russula decolorans**, milk-clotting enzymes, immobilization methodology 4317.
- Russula emetica**, antibiotics, antitumor activity 6065.
- fruit bodies, extracts, antifungal activity 9201.
- Rust**, *Acacia*, fungi endogenous species, Hawaii 7236.
- Anemone* flaccida, life cycle, *Puccinia japonica* 8011.
- Arachis hypogaea*, leaves phenolic acids levels association 8771.
- biological control, *Bromus tectorum* 8024.
- Conarium* camptoniae, epidemiology, host-pathogen interactions, host alternation, *Comptonia peregrina*, *Pinus banksiana* 5602.
- Conarium quercum* f.sp. *banksianae*, disease control, use, 2-iodobenzanilide, benomyl, *Pinus* 3916.
- Conarium ribicola* strains, virulence, disease resistance, *Pinus monticola*, USA, Oregon 8949.
- disease control, induction, defensive mechanisms, hypersensitive response 8102.
- disease resistance, brome mosaic virus infection effects on, *Triticum aestivum* 263.
- disease resistance, *Eucalyptus* 5594.
- disease resistance, plant breeding, research programs, *Triticum aestivum* 2876.
- Endonarium harknessii*, pathogenesis, *Pinus banksiana* 8946.
- Endonarium harknessii*, susceptibility, geographical variations, seedlings, *Pinus ponderosa* 8945.
- fungi, host range, India 2036.
- Glycine max, disease spread, pathogenicity, association, economics 7944.
- Gramineae, urediniospores, *Puccinia recondita*, *Puccinia graminis*, epidemiology 5417.
- Hemileia vastatrix*, *Coffea*, *Verticillium psalliotae* hyperparasitism, Malaysia 1204.
- Hemileia vastatrix*, disease spread, Western Hemisphere, *Coffea* 2798.
- Hemileia vastatrix*, plant breeding, disease resistance, *Coffea arabica* 6289.
- Melampora lini, host-pathogen interactions, peroxidase activity, lignin biosynthesis, incompatibility, *Linum usitatissimum* 8046.
- Melampora lini, *Linum usitatissimum* disease resistance, India 3875.
- Mesopogonidium betulinum*, urediniospores, spore germination, temperature effects on, *Betula* 8950.
- Phakopsora pachyrhizi*, host range, host alternation, disease reservoirs, *Leguminosae* 7940.
- Phaseolus vulgaris*, disease resistance, cultivars comparison, sporulation incidence 8082.
- Phragmidium violaceum*, *Rubus ulmifolius*, Australia 8012.
- Puccinia cardi-pyrenopezizae*, biological control, *Carduus tenuiflorus*, *Carduus pycnocephalus* 8025.
- Puccinia*, epidemics, *Triticum*, LANDSAT, monitoring, Pakistan 6246.
- Puccinia graminis* f.sp. *scalis*, disease resistance, plant breeding, *Hordeum vulgare* 8073.
- Puccinia graminis* f.sp. *tritici*, host-pathogen interactions, disease resistance, *Triticum aestivum* 8092.
- Puccinia graminis* f.sp. *tritici*, virulence, rust, association, gene expression, geographical distribution 7922.
- Puccinia helianthi*, *Helianthus annuus*, Australia 8014.
- Puccinia hordei*, disease resistance, genes, host-pathogen interactions, models, *Hordeum vulgare* 2860.
- Puccinia melanocephala*, *Saccharum*, epidemiology, USA 1124.
- Puccinia polysora*, disease resistance inheritance, *Zea mays* 8071.
- Puccinia recondita*, incidence, *Triticum* × *Secale cereale* leaves, stomata size distribution 7955.
- Puccinia sorghi*, virulence, *Zea mays* 5423.
- Puccinia*, *Triticum aestivum* seedlings, linkage analysis 258.
- Uromyces appendiculatus*, disease resistance, *Phaseolus vulgaris*, inheritance 2850.
- Rust, (continued)**
- Uromyces fabae*, *Vicia faba*, triadimefon, antifungal activity 3901.
- Uromyces phaseoli*, haustoria inhibition, triphenylphosphite, *Phaseolus vulgaris* 2859.
- Uromyces phaseoli*, *Phaseolus vulgaris*, association, chloroplasts ultrastructure, chlorophyll levels 2775.
- Uromyces phaseoli*, plant breeding, *Phaseolus vulgaris*, disease resistance 3857.
- Uromyces phaseoli*, races virulence, disease resistance, *Phaseolus vulgaris* 2846.
- Uromyces trifolii*, *Trifolium repens* 8781.
- Uromyces viciae-fabae*, disease resistance, plant breeding, *Vicia faba* 2882.
- Uromyces viciae-fabae*, susceptibility, *Pisum sativum*, varieties 8774.
- Vicia faba*, triadimefon effects on ultrastructure, *Uromyces viciae-fabae*, *Puccinia recondita* 8131.
- Rye**, *Fusarium zeae* latent incident 1079.
- Ryegrass mosaic virus**, infection, inhibitors isolation, leaves, *Lolium perenne* 1984.
- (S,S)-N,N'-Ethylenediamine succinic acid, Actinomycetes, production, inhibition, phospholipase C 5957.
- Sacbrood virus**, antisera production 5891.
- Saccharides**, effects on *Thermomonospora fusca* β -D-glucosidase, activity 1796.
- Saccharomonospora viridis**, dust, isolation, enumeration, methodology comparison 1646.
- Saccharomyces**, antibiotic sensitivity testing, genetics 5803.
- aroma compounds biosynthesis, identification, gas chromatography, I.R. spectroscopy 7813.
- aroma compounds, champagne, effects on 4417.
- brewing, genetic engineering, reviews 4407.
- ethanol, production, fermentation, reviews 6110.
- fatty acid composition, gas chromatography 836.
- haploidy, diploidy, determination methodology 9333.
- immobilized cells, crop residues fermentation, ethanol production 3641.
- mycotoxins, levels, Roquefort cheese, Egypt 7058.
- petite mutant, ethanol fermentation 6127.
- starter cultures, sherry production 993.
- strains, development, mutation, hybridization, methodology 7801.
- Saccharomyces carlsbergensis**, efficacy, repellents, *Ctenophthalma felis*, dogs 8092.
- glucose fermentation, ethanol production, factors affecting 7815.
- preservation methodology 6792.
- protoplast fusion, fermentation, brewing 2687.
- pyridoxine bioassays 813.
- thiamindiphosphate kinase, isolation, purification, characterization 6014.
- thiamindiphosphate kinase, purification, characterization 925.
- thiamindiphosphate kinase, purification, characterization 7739.
- threonine dehydratase activity, L-isoleucine inhibition, allosteric properties, kinetics 7727.
- wort fermentation, ethanol production, α -D-glucosidase activity 5287.
- Saccharomyces cerevisiae**, adenosineimethionine decarboxylase, purification, characterization, reviews 8569.
- amino acids auxotrophy, phenethyl alcohol sensitivity 3062.
- antifungal activity, cyclosporin A 8312.
- antifungal activity, essential oils, spices 8318.
- antifungal activity, N-(benzylthio)carbamoyl carbonyl aryl esters 2224.
- antifungal activity, rifamycin 8363.
- aspartyl-IRNA synthetase, glucose, glucose-6-phosphate residues identification 83.
- aspartyl-IRNA synthetase, purification, physicochemical properties 1765.
- ATP regeneration, bioactors 169.
- batch culture, temperature association RNA 799.
- calmodulin multiple forms, purification, characterization 8513.
- cell culture, batch culture, mathematical models 8533.
- cell culture, Glycine max seeds extracts effects on 5069.
- cell permeability, malate dehydrogenase, alcohol dehydrogenase, activity, continuous culture 3592.
- chemostats, feedback inhibition, ethanol 6938.
- clinical isolates, identification, clinical microbiology 808.
- cloning, *Lactobacillus delbrueckii*, malic acid, lactic acid, genes, role, wine, fermentation 2681.
- cloning vectors, gene expression, mice α -amylase biosynthesis 5169.
- continuous culture, biomass production, optimization, respiratory quotient monitoring 8501.
- continuous culture, pH levels, growth 5085.
- corn, ethanol fermentation, catabolite repression 2677.
- cytochrome c oxidase, metals centers, amino acids incorporation, reviews 5180.
- cytochrome P-448 activity, benz[a]pyrene hydroxylases dependent 5132.
- dehydration resistance, sucrose, lactose effects on 1047.
- dehydrogenase, reduction, bicyclo[3.2.0]hept-2-en-6-one 5255.
- dimethyl sulfoxide reductase, methionine sulfoxide inhibition, wort 6941.
- dimethyl 2-methyl-3-oxosuccinic acid reduction, methyl 2-methylmalates biosynthesis 5561.
- endonuclease, purification, characterization, electrophoresis 7756.
- ergosta-7,7-diene-3 β ,23 β -diol isolation, new records 845.
- ergosterol biosynthesis, cytochrome P-450 role 944.
- ethanol, effects on, temperature, relationship, viability 6106.
- ethanol extraction, glucose fermentation 5276.
- ethanol, fermentation 3514.
- ethanol fermentation, *Beta vulgaris* juices 987.
- ethanol fermentation, biomass production, molasses, carbon sources, nitrogen sources 3607.
- ethanol fermentation, corn, mannitol, sorbitol, inhibition 2678.
- ethanol, fermentation, membranes, bioactors 7804.
- ethanol, intracellular levels, factors affecting 989.
- ethanol production 5274.
- ethanol, production, association, potassium, concentration 3613.
- ethanol production, comparison 986.
- ethanol production, D-xylulose conversion 3643.
- ethanol production, fermentation, tubers, *Helianthus tuberosus* 5297.
- ethanol, production, fermenters, continuous culture 981.
- ethanol production, flocculation gene transfer 4406.

Saccharomyces cerevisiae, (continued)

ethanol production, malic acid conversion, activity, malate dehydrogenase, alcohol dehydrogenase 4409.

ethanol production, measuring techniques, gases sensors electrodes 1868.

ethanol production, oxygen effects On 3603.

ethanol production, salts, inhibition 4412.

ethanol production, sugars fermentation, Maillard reaction 8662.

ethanol production, water effects on 3659.

ethanol production, whey permeate fermentation 8669.

ethanol tolerance, relationship heat shock proteins biosynthesis 988.

exo-1,4- α -D-glucosidase production, genetic analysis 5155.

extracts, food industry, by-products, brewing, baking 201.

fatty acid synthetase active sites peptides, amino acid sequence, comparison, *Cephalosporium caerules* 8529.

fatty acid synthetase, purification 6854.

fatty acid synthetase, purification, characterization, comparison, *Cephalosporium caerules* 8528.

feeds, effects on growth, chickens 7874.

fermentation, ammonium, enhancement, characterization 7810.

fermentation, continuous culture, extraction, ethanol 7808.

fermentation, continuous culture, oscillations, ethanol production, mathematical models 6119.

fermentation, ethanol monitoring, sensors 4419.

fermentation, ethanol production, ammonium stimulation 3626.

fermentation, ethanol production, monitoring, computer applications 5966.

fermentation, ethanol production, monitoring, oxygen consumption, carbon dioxide, computer applications 6140.

fermentation, ethanol production, optimization, mathematical models 5964.

fermentation, ethanol production, optimization, mathematical models, bioreactors 6138.

fermentation, glucose metabolism, growth, mathematical models 6121.

fermentation, hydrolysis, *Pinus radiata*, wood, inhibitors 7807.

fermentation, measuring techniques, gas chromatography, levels, ethanol, butanol, acetone 3581.

fermentation, monitoring, thermodynamics, calorimetry 6080.

fermentation optimization, sodium azide effects on electron transport cytochrome c oxidase, ethanol production 3624.

fermentation, pesticide residues biodegradation association 990.

fermentation, single-cell protein production, optimization, monitoring, computer applications 5967.

fermentation, tubers extracts, saponins purification, *Ficaria ranunculoides* 5222.

fermentation, viability, fatty acids inhibition 3625.

fermenters, ethanol, extraction, purification 5277.

β -D-fructofuranosidase, immobilization, coupling, *Zea mays* crop residues 8551.

β -D-fructofuranosidase, immobilization, effects on activity, stability 7743.

β -D-fructofuranosidase, immobilized enzymes, activity, stability 1770.

β -D-fructofuranosidase, sucrose hydrolysis, viscosity effects on 8535.

fructose-bisphosphatase subunits, molecular weight 5130.

gene libraries, centromeres DNA, isolation methodology, transformation 820.

gene mapping, methodology, actin genes, use plasmid 2 μ , chromosome 6 6788.

genetic engineering, brewing 3628.

genetic engineering, ethanol production, fermentation, reviews 6112.

genetic engineering, production, drugs, cloning vectors, methodology 7775.

glucose fermentation, ethanol production 8655.

α -D-glucosidase active sites, histidine residues chemical modification 6851.

α -D-glucosidase gene expression 3442.

β -D-glucosidase, immobilized cells+immobilized enzymes, cellobiose conversion, ethanol production 8664.

glutaminase, purification, characterization 6966.

growth, cytoplasmic membranes structure, *Bacillus subtilis* bacillomycin, iturin A, effects on 4886.

growth, fermentation, proteins distribution, flow cytometry, monitoring, mathematical models 6121b.

growth, mitochondria, coenzyme nitrate effects on 1338.

hexokinase, stereospecificity, glucose, animals 6853.

hybrids development, ethanol fermentation strains 6146.

hydrolysis, chemical modification, glucans, laminaran, chitin 6942.

immobilized cells, cross-flow bioreactors, silica supports, ethanol fermentation 3605.

immobilized cells, ethanol production, bioreactors 3634.

immobilized cells, glucose fermentation, ethanol production, fermenters 3606.

immobilized cells, molasses fermentation, ethanol production 167.

immobilized cells, molasses fermentation, ethanol production 8659.

immobilized cells, steroids conversion 104.

immobilized cells, sucrose fermentation, ethanol production, monitoring, computer applications 6143.

immobilized cells, sugars fermentation, ethanol production 6130.

immobilized cells, whey, lactose fermentation, ethanol production 1864.

immobilized enzymes methodology, characterization, fermentation applications 4408.

inorganic pyrophosphatase active sites conformation, asymmetry induction, kinetics 3434.

isoleucine-valine operon cloning, gene regulation, biosynthesis, 2,3-butanedione, 2,3-pentanedione, flavor compounds, beer 7797.

ligonocalluloses fermentation, crop residues, ethanol production 5292.

mannans linkage, site location 5203.

media (culture), oil cake extracts, Glycine max 8485.

mitochondria, lipoxigenase, purification, characterization 913.

musts fermentation, volatiles production, *Botrytis cinerea* activators effects on 3608.

oxygen uptake effects on continuous culture 4229.

Papulaea rhaerosperma papulacandin B, glucans biosynthesis inhibition 1440.

peat hydrolysis, fermentation, ethanol production 6930.

phenylalanyl-RNA synthetase, carbohydrate composition, comparison cytoplasm, mitochondria 930.

6-phosphofructokinase, purification, characterization 7844.

phospholipase A1, purification, characterization 1767.

phospholipids biosynthesis, enzymatic activity detection, autoradiography 3364.

3-phytase, 6-phytase, purification, kinetics 4319.

production, glycerol, ethanol, deficient mutant, alcohol dehydrogenase 3642.

promoters, xylose isomerase gene expression, *Escherichia coli* 5157.

protein kinase, isoenzymes, purification, characterization 3456.

proteinase, purification, fluorometry assays, substrate specificity 935.

protoplasts isolation, centrifugation, density gradients, methodology 9334.

pyruvate decarboxylase catalysis, pyruvic acid, acetaldehyde, aceton

Saccharomyces cerevisiae, (continued)

by-products, chromatography use 7721.

retinylphosphate mannose biosynthesis, biochemical characteristics 2631.

ribonuclease H, purification, characterization, activity 886.

ribonuclease, purification, characterization 2626.

\times *Saccharomyces diastolicus*, protoplast fusion, media (culture) 5925.

Saccharomyces diastolicus, spheroplasts membrane fusion, flocculation activity, role fermentation 8637.

+ *Saccharomyces melis* protoplast fusion, fermentation association 971.

Saccharopine reductase biosynthesis, role, Lys14 gene, Lys9 gene 7690.

single-cell protein, feeding trials, effects on phytic acid, nutrient availability, phosphorus 7893.

single-cell protein, feeds, toxicity, pathogenesis, buffaloes 1071.

single-cell protein, nutritive value, silage, preservatives, cattle, sheep 2747.

single-cell protein production, industrial wastes, distilleries 865.

Δ 24-sterol methyltransferase activity, azasterol inhibition, kinetics 7718.

strains, fermentation, flocculation, cytoplasmic inheritance, homozygotes 5268.

sulfur containing simulated beef flavor compounds volatiles, chemical composition 1046.

temperature effects on cell culture 5084.

tepache, fermentation 1898.

translation cell-free systems, preparation 821.

wine fermentation, nontarget organisms, toxicity, herbicides, insecticides, fungicides 2082.

wort fermentation, acetyl-CoA levels, acetic acid esters production 4416.

wort fermentation, mezzal 1862.

Saccharomyces chevalieri, enumeration, oranges juices frozen products 7850.

Saccharomyces delbrueckii, methyl-2-methyl-3-(2-furyl)-3-oxopropionate reduction, methyl-2-methyl-3-(2-furyl)-3-hydroxypropionate production 4399.

Saccharomyces diastolicus, detection, breweries, methodology 5296.

exo-1,4- α -D-glucosidase production, genetic analysis 5155.

exo-1,4- α -D-glucosidase subunits, purification, characteristics 8570.

\times *Saccharomyces cerevisiae*, protoplast fusion, media (culture) 5925.

Saccharomyces cerevisiae, spheroplasts membrane fusion, flocculation activity, role fermentation 8637.

Saccharomyces ellipsoideus, fermentation wine, relationship, *Vitis vinifera* content, carbon, hydrogen, nitrogen 7793.

Saccharomyces fermentali, methyl-2-methyl-3-(2-furyl)-3-oxopropionate reduction, methyl-2-methyl-3-(2-furyl)-3-hydroxypropionate production 4399.

Saccharomyces formosensis, immobilization, growth, ethanol production 1866.

immobilized cells, ethanol production 5291.

immobilized cells, molasses fermentation, ethanol production 168.

Saccharomyces italicus, fermentation, gases liquids phase transition, spectrometry fermenters 154.

Saccharomyces kluyveri, mating factor, purification, amino acid sequence 3410.

Saccharomyces lactis, β -D-galactosidase activity, assays, dairy industry 5172.

Saccharomyces melis, + *Saccharomyces cerevisiae* protoplast fusion, fermentation association 971.

Saccharomyces oviformis, aroma compounds biosynthesis, identification, gas chromatography, I.R. spectroscopy 7813.

musts fermentation, volatiles production, *Botrytis cinerea* activators effects on 3608.

Saccharomyces rouxii, spoilage, water content effects on, mathematical models, apples 8877.

Saccharomyces uvarum, acetic acid esters production, wort fermentation 4420.

ethanol, fermentation 3616.

ethanol fermentation 6127.

fermentation, high-gravity wort, nutrient requirements, ethanol production 8667.

immobilized cells, ethanol production, fermentation, juices, *Sorghum bicolor* 8658.

mutants, fermentation, ethanol, production 7802.

Saccharomyces uvarum var. inuliticus var. nov., identification, biological properties, association ethanol biosynthesis 159.

Saccharomyces vini, aging, champagne 4405.

lipoxigenase activity 5171.

Saccharomycopsis fibuliger, growth, pectin, biodegradation, waste treatment 7831.

fermentation, potatoes food processing waste water, biomass 157.

Saccharomycopsis lipolytica, immobilized cells, citric acid production 2554.

Saccharopine reductase, biosynthesis, role, Lys14 gene, Lys9 gene, *Saccharomyces cerevisiae* 7690.

Saccharum, nitrogen-fixing bacteria identification 5652.

Puccinia melanocephala rust, epidemiology, USA 1124.

Saccharum officinale, bagasse, *Aspergillus fumigatus* biodegradation, enzymes role 186.

carbendazim, treatment, effects on, fungi, spore germination 8127.

varieties 3686.

fermentation, Lactobacillus ammonia, yeasts, *Lactobacillus* 2754.

ratoon stunt, *Corynebacterium nov.* isolates, characterization 6240.

ratoon stunt, coryneforms, characterization 3810.

roots, *Pythium* isolation, media (selective) 1993.

stallage, digestion (anaerobic), fermenters, mechanisms 1861.

Xanthomonas abutilis scald, chloroplasts differentiation 253.

Saccharum spontaneum, *Puccinia melanocephala* rust, epidemiology, USA 1124.

Safety, instruments, bacteria manipulation, laboratories occupational hazards 5872.

Safety regulations, aflatoxins food contamination, reviews 7065.

food industry, enzymes 43.

legislation, occupational exposure, industries, enzymes 45.

Safety regulations, (continued)
toxicity testing, food industry, enzymes, microorganisms 44.
weed control, biological control, pathogens 3897.

Salfracin,
antitumor activity, antibacterial activity 1446.
fermentation, antitumor activity, *Pseudomonas fluorescens* 958.
physicochemical properties, N.M.R. 959.

Saframycin R,
structure, N.M.R., interaction, DNA 957.

Saled dressings,
mayonaisse, microorganisms contamination 7847.

Salicylanilides,
derivatives, synthesis, antifungal activity, disease control, downy mildew, *Cucumis sativus* 8315.

Salicylate 1-monooxygenase,
characterization, *Trichosporon cutaneum* 6864.

Salicylic acid,
biodegradation, *Micrococcus* 3664.
biodegradation, plasmids, genetic analysis, reviews, hydrocarbon-degrading bacteria 8284.
derivatives, antifungal activity 3063.
disease control, *Agrobacterium tumefaciens*, crown gall, *Nicotiana tabacum* 7217.

Salinity,
Chrysanthemum morifolium, effects on infection susceptibility, *Phytophthora cryptogea* 7181.
effects on, bacteria, nitrification, estuaries, measuring techniques 3338.
effects on nitrogen fixation, nodulation, *Rhizobium*, nitrogen-fixing bacteria, crops 2980.
effects on spore germination, *Clostridium botulinum* 1899.
inhibition, *Rhizobium* growth rate, isolates, *Arachis hypogaea* 2170.

Salinomycin,
production, lipids carbon sources, fermentation, aeration, *Streptomyces albus* 4674.

Saliva,
pretreatment, *Mycobacterium tuberculosis* cell culture methodology 5897.

Salix,
Rhizoma salicinum infection, national parks, Iceland 7195.

Salix alba,
host-pathogen interactions, *Uncinula adunca*, isolation, morphology 8191.
Phellinus punctatus incidence, USA, North Dakota 3838.
propagules, disease transmission, Watermark disease, *Erwinia salicis* 363.

Salix alba var. vitellina,
Phellinus punctatus incidence, USA, North Dakota 3838.

Salix babingtonia,
Phellinus punctatus incidence, USA, North Dakota 3838.

Salix caprea,
cellulose, cellulase hydrolysis 8676.

Salix eriocephala,
Phellinus punctatus incidence, USA, North Dakota 3838.

Salix nigra,
wood, storage, decay fungi, *Basidiomycetes* 8197.

Salix rotundifolia,
ectomycorrhizas, temperature effects on, tundra 2103.

Salix wallichiana,
host-pathogen interactions, *Ucinula adunca*, isolation, morphology 8191.

Salmo gairdneri,
bacteria isolates, drug resistance plasmids incidence 9072.
body weight, food conversion, fish culture, food contamination effects on 219.
Renibacterium salmoninarum kidney diseases, bacterins vaccines 6662.

Salmonella,
antibacterial activity, ciprofloxacin 4744.
antibiotic resistance, animal isolates, meat isolates 6441.
antibiotic resistance, R factor incidence 6430.
carcasses, buffaloes 6199.
carriers, food industry, man 8427.
cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1386.
chloramines disinfection, pH effects on 9246.
clinical isolates, antibiotic resistance, epidemiology 3992.
clinical isolates, antibiotic sensitivity testing 7414.
contamination, feeds, slurries, sheep 7018.
contamination, food, characterization 6971.
contamination, poultry carcasses, meat industry 1051.
contamination, poultry meat products 1049.
contamination, sewage sludge, *Larus ribundus* feeding association, excretion relationship, serotyping 9245.
cultivation techniques, *Reptilia* feces, zoological gardens 4208.
decontamination, microwave radiation, steam, hot air, feeds, chickens 1066.
detection, DNA hybridization analysis, food contamination 673.
detection methodology, diarrhea, man 5921.
detection methodology, phase O1 use, milk samples 1573.
detection, milk contamination, enzyme-linked immunosorbent assay methodology 766.
drug resistance 3040.
drug resistance, India animal isolates 3042.
drug resistance patterns, R factors incidence 3039.
enterotoxins, detection methodology, CHO cells use 1933.
growth, contamination, chickens 7039.
food contamination, enzyme immunoassay detection 8478.
food contamination, minced meat 203.
food contamination, seafood, *Pisces* 8712.
genetic drift, colonies, strains variance, effects on Ames test data 7597.
growth, poultry contamination, glucose oxidase control 7843.
growth, storage, eggs 6969.
identification, AutoMicrobic test 1645.
in vitro antibiotic sensitivity testing, nosocomial environment clinical isolates 6502.
incidence, poultry, growth conditions, food processing 6983.
incidence, poultry processing, Australia 6194.
indicator species, inactivation, waste water, marine environment 1499.
indicator species, isolation, sludges, wastewater treatment, characterization, USA, Florida 4927.
indicator species, microbial pollution, sewage outfalls, coastal waters 6711.
indicator species, pollution monitoring methodology, water quality 5856.
indicator species, population levels, water temperature, rivers, estuaries 4131.
isolation, feces storage effects on 5051.
isolation, Italy, antibiotic sensitivity testing 9160.
isolation, milk products, methodology 6182.

Salmonella, (continued)
isolation, sewage contamination water, media (enrichment), methodology 9259.
isolation, sewage sludge, methodology comparison 9231.
levels, wastewater treatment association aquaculture, *Hypophthalmichthys molitrix*, *Arctichthys nobilis* 1463.
media (isolation), agar tubes 2503.
media (selective), isolation, methodology 7628.
microbial pollution, estuaries 6713.
microbial pollution, most probable number, water analysis 3218.
microbial pollution, water pollution, media (enrichment) 4176.
pathogens, pollution control, sewage sludge, digestion (anaerobic) 2368.
radiation disinfection, fishery products, feeds 5359.
recovery, pyruvic acid, media (enrichment), pyruvic acid effects on 3322.
serotypes, antibiotic sensitivity testing 7415.
serotypes, biotypes, isolation, meat, feeds 9863.
serotyping, automated methods 2506.
survival, antibiotic resistance, beef, refrigeration 7005.
survival, pasteurization, cheese 1902.
typhoid fever, agglutination, bioassays, diagnosis, methodology, man 667.
vaccines production, antigen O, immunogenicity 2322.
water isolates, R factors transfer, antibiotic resistance, waste water, surface water 9046.
water pollution, media (isolation) 5857.

Salmonella agona,
detection methodology, milk samples, phase O1 use 1573.
microbial pollution, rivers 4129.

Salmonella albania,
enzyme-linked immunosorbent assay, poultry 8759.

Salmonella anatum,
detection methodology, phase O1 use, milk samples 1573.

Salmonella dublin,
antibacterial activity, peptides analogues 2210.
antibiotic resistance, animal isolates, meat isolates 6441.
detection methodology, phase O1 use, milk samples 1573.

Salmonella enteritidis,
chloramphenicol, bactericidal activity 4853.
detection methodology, phase O1 use, milk samples 1573.
survival, slurries, wastewater treatment, nitrate-reducing bacteria 6700.

Salmonella gers,
antibiotic sensitivity testing 7415.

Salmonella hadar,
spillage, freeze-thawing storage effects on, beef, poultry 6975.

Salmonella infantis,
microbial pollution, rivers 4129.

Salmonella krefeld,
detection methodology, phase O1 use, milk samples 1573.

Salmonella minnesota,
endotoxins, glycolipids, chemical composition, ultrastructure 4477.
endotoxins, ultrastructure 3759.
endotoxins, ultrastructure, hydrophobicity, acids, bases treatment effects on 4476.
enterobacterial common antigen, agglutination, immunodiagnosis, infection 5911.
immunoglobulin G, enzyme-linked immunosorbent assay, rabbits 2459.
lipid A fractions, enzyme-linked immunosorbent assay, thin-layer chromatography 5064.

Salmonella paratyphi,
blood culture, sodium polyanethanol sulfonate effects on recovery 1579.

Salmonella saint-paul,
detection methodology, phase O1 use, milk samples 1573.

Salmonella sofia,
antibiotic sensitivity testing 7415.

Salmonella typhi,
antibacterial activity, formazans 9139.
antigen VI, detection, agglutination, comparison, enzyme-linked immunosorbent assay, use, diagnosis 663.
blood culture, sodium polyanethanol sulfonate effects on recovery 1579.
chloramphenicol, bactericidal activity 4853.
chloramphenicol resistance 429.
clinical isolates, antibiotic resistance, chloramphenicol 9080.
clinical isolates, R factors, electrophoresis, antibiotic resistance, epidemiology 4001.
indicator species, membrane filtration, media (enrichment), water 4935.
isolation, identification, water, methodology 3332.
isolation, swabs, sewage effluents 6717.
isolation, typhoid fever, antibiotic resistance, biochemical characteristics 3024.
plasmids, antibiotic resistance mediation, chloramphenicol, trimethoprim, ampicillin 7322.
Shigella sonnei association, vaccines, antigenicity, safety 4890.
typhoid fever, diagnosis, Widal test 2479.

Salmonella typhimurium,
accumulation, elimination, *Mercenaria mercenaria*, characterization 5314.
Ames test, plasmid pKM101, effects on, DNA repair 3328.
ampromil, effects, plasmid pKM101, antibiotic resistance 7324.
antibacterial activity, spices, *Salvia officinalis* 8719.
antibiotic resistance, gentamicin, cattle 3998.
aspartic acid hydrazides, inhibition, growth 6302.
bioassays, siderophores requirements, soil 375.
characterization subunits oxidative phosphorylation, characterization, comparison, *Escherichia coli* 3440.
detection methodology, phase O1 use, milk samples 1573.
diluent effects on viability 5073.
enzyme-linked immunosorbent assay, poultry 8759.
experimental infection, pigs, feeds, chlorotetracycline, virginiamycin, antibacterial activity 4466.
growth, temperature effects on, hot-boning, beef 6959.
histidine-binding protein, L-histidine binding, conformation, N.M.R. 6811.
inactivation, cooking, eggs 1050.
inactivation, poultry, cooking, microwave oven 1048.
microbial pollution, rivers 4129.
mutagenicity testing, acridine, benzo(f)quinoline, combustion products, phase P22 3331.
plasmids analysis, phase typing, drug resistance patterns, clinical isolates 4690.
spillage, freeze-thawing storage effects on, beef, poultry 6975.
strains, Ames test variability, genetic drift, analysis 5915.

Salmonella typhimurium, (continued)

strains, Ames test variability, genetic drift, statistical analysis 5916.
strains, genetic drift, Ames test variability 5914.
vaccines, β -propiolactone inactivation, immunogenicity, mice 2324.
vaccines, salmonellosis prophylaxis, cattle 5811.

Salmonella typhimurium var. classic,

antibiotic resistance, animal isolates, meat isolates 6441.

Salmonella typhimurium var. copenhagen,

antibiotic resistance, animal isolates, meat isolates 6441.

Salmonella waltveden,

enterotoxins, biosynthesis, purification 2765.

Salmonellosis,

milk contamination, cost-benefit analysis, man 4449.
prophylaxis, *Salmonella typhimurium* vaccines, cattle 5811.

Salmonidae,

furunculosis, *Aeromonas salmonicida*, survival, rivers fresh water, role disease transmission 4937.

Salt marshes,

bacteria, enumeration, methodology 4177.

sediments, detritus lignocelluloses biodegradation, bacteria, fungi 6171.

Salts,

ammonium, heptacain, antibacterial activity, *Staphylococcus aureus* 7541.

heavy metals, *Oryza sativa* seedlings, effects on disease resistance, brown spot, *Drechslera oryzae* 2077.

heavy metals, susceptibility, *Mycobacterium scrofulaceum*, *Mycobacterium intracellulare*, *Mycobacterium avium* 3043.

inhibition, ethanol production, *Saccharomyces cerevisiae* 4412.

organic acids, antimicrobial activity, fungi, silage 6489.

Salvia officinalis,

spices, essential oils, antibacterial activity 8719.

Salvia palestina,

flavonoids, antibacterial activity, bacteria 4008.

Sampiera,

air spora, epidemiology, plant diseases 804.

bacterioplankton, water stratification, marine environment 1611.

Sampling,

contamination, hygiene, meat industry 3714.

Epichloe typhina, methodology, enzyme-linked immunosorbent assay use, *Festuca arundinacea* 796.

mycelia, fermenters 9332.

skin, microflora, methodology, reviews 4964.

SAN 371F,

cross-resistance, metalaxyl, *Phytophthora infestans*, *Pseudoperonospora cubensis*, disease control, *Solanum tuberosum*, *Cucumis sativus* 2894.

Sand,

dunes, coastal environments, sulfur oxidation, acidity, soil microorganisms 9868.

filtration methodology, roxvirus removal, inactivation, drinking water 9253.

+tar combustion wastewater treatment, oil and gas industry, organic compounds, microorganisms oxidation 3194.

Sanitation,

dairy industry 5867.

hatcheries, microorganisms monitoring 2330.

waste disposal, hospital wastes, pathogens 1520.

water supplies, association, disease control, *Shigella*, diarrhea, man 7529.

Sanitizers,

antibacterial activity, methodology 1526.

antimicrobial activity, characterization 1354.

antimicrobial agents, dentures, bacteria, fungi 2420.

Sanitium album,

spike, pathogens, phytotoxins, *Mycoplasma* 8955.

 α -Santonin,

hydrogenation, 1,2-dihydro- α -santonin production, stereochemistry,

fermentation, *Streptomyces cinereocrotaci* 5245.

Sap,

Nicotiana tabacum, immunodiffusion, detection, cucumber mosaic virus 8822.

Nypa fruticans, vinegar production, fermentation, *Acetobacter aceti* 6999.

Sapindus mukurosi,

fruit bodies, saponins isolation, characterization 8627.

Saponins,

isolation, *Sapindus mukurosi* fruit bodies, characterization 8627.

purification, tubers extracts, fermentation, fungi, *Ficaria ranunculoides* 5222.

Saprolegnia,

Thiophene derivatives antifungal activity, photoinduction 3060.

Saprolegnia hypogyna,

antifungal activity screening, aquatic environment fungicides 2893.

Saprolegnia megasperma,

antifungal activity screening, aquatic environment fungicides 2893.

Saprolegniaceae,

rhizosphere, *Lycopodium esculentum*, *Oryza sativa*, *Triticum vulgare*, *Pisum sativum* 8220.

Saprophy,

food preferences, fungi decomposition, *Pinus*, leaves, *Porcellio scaber* 2912.

Fungal oxysporum f.sp.ciceri, plant debris colonization, temperature effects on, soil 5618.

Morchella esculenta, spore germination, soil temperature 386.

Saprophytes,

bacteria, enumeration, methodology, water quality 8755.

Escherichia turicum, survival, soil 2137.

fungi, antagonism, *Rhizobium* growth, in vitro 7248.

fungi, roots colonization, soil amendment, species composition, soil disturbance, mines 8230.

Phytophthora colocasiae, soil, survival, association, *Colocasia* 8958.

Sclerotium roffii, survival, soil 3943.

Sarcoma,

antitumor activity, polysaccharides, extracellular polymers, *Clostridium*, mice 3540.

Sarcoma 180,

antitumor activity, glucans, isolation, *Griifolia frondosa* fruit bodies, mice 6891.

Sarcosine oxidase,

cysteine, histidine residues chemical modification, *Corynebacterium* 12.

dithiothreitol reduction, kinetics, *Corynebacterium* 6842.

immobilized enzymes, *Corynebacterium*, electrodes, creatine, creatinine 89.

Sassafras randsaine,

magnolol, isomagnolol, isolation, chemical properties 454.

Saudi Arabia,

Glycine max, *Rhizobium japonicum* inoculation methodology 2953.

Saudi Arabia, (continued)

plant diseases, bacteria, phytopathogenic fungi, plant viruses 5399.

Sausages,

bacteria, contamination 1908.

fermented food, phage B2 infection, starter cultures, *Lactobacillus plantarum* 5334.

fermented food, phage fri infection, starter cultures, *Lactobacillus plantarum* 5333.

starter cultures 6188.

starter cultures, *Lactobacillus* 1900.

Savannahs,

soil, urea fertilizers, sulfur coatings, pH, nitrogen levels 8256.

tropical environment, ecosystem dynamics, soil microorganisms 2941.

Sawdust,

cellulase hydrolysis, immobilized kinetics, radiation polymerization, *Trichoderma reesei* 6349.

soil amendment, disease control, root rot, *Triticum aestivum* 8088.

Scab,

Cladosporium carpopophilum, *Prunus*, disease control, fungicides, new records 339.

Cladosporium carigenum, host-pathogen interactions, leaves histopathology, disease resistance, *Carya illinoensis* 3814.

Cladosporium cucumerinum, *Cucumis sativus*, seedlings, pathogenesis, role, proteinase 7178.

disease spread, *Cladosporium carpopophilum*, conidia release, relative humidity, I.R. radiation 272.

Elisioe batatas, *Ipomoea batatas*, tubers yield 8007.

Fusarium, Gramineae, pathology, zeaxanthone production, animals ingestion, toxicity, reviews 7056.

Malus floribunda, *Malus inaequalis* pathogenicity, growth, leaves 7988.

Malus pumila, captan use disease control, residues 8925.

Venturia inaequalis, *Malus pumila*, disease resistance, plant breeding 2835.

Venturia inaequalis, *Malus pumila* fruits, susceptibility, role, age, temperature, water availability 2797.

Venturia inaequalis, sterols inhibitors, disease control, *Malus* 3881.

Venturia pyrina, disease resistance, *Pyrus amygdaliformis*, *Pyrus communis* 8080.

Scald,

Monographella abscisens, fungicides, disease control, *Oryza sativa* 2087.

Rhynchosporium secalis, disease resistance, genetic variance, plant breeding,

Hordeum vulgare 316.

Xanthomonas albilineans, *Saccharum officinale*, chloroplasts differentiation 253.

Rhynchosporium secalis, *Hordeum vulgare*, pure culture, biosynthesis,

rhynchosporoides 3801.

Scandium(III),

iron(III) enterobactin complex, antibacterial activity, gram-negative bacteria 5727.

Scanning electron microscopy,

Aspergillus flavus, pathogenesis, *Zea mays* 6245.

detection methodology, bacteria cell adhesion, comparison, penetration, cell culture monolayers 5898.

fungi conidia, preparation 2532.

nocardin A, effects on, *Pseudomonas aeruginosa*, *Escherichia coli*, morphology 6218.

Pseudomonas syringae pv. morsprunorum infection, leaves, *Prunus* 2801.

samples freezing, fungi 8487.

Vigna unguiculata plant diseases, *Fusarium oxysporum*, mixed infection, sunn hemp

mosaic virus, pathogenesis 6236.

Xanthomonas campestris var. pruni, infection, *Prunus domestica* 7158.

Scaphytopilus caesus,

disease transmission, plant viruses infection, buds proliferation, *Glycine* max,

USA, Louisiana 4510.

Scaphytopilus nitridus,

disease transmission vectors, *Spiroplasma citri*, isolation, yellows, X-disease

8621.

Scenedesmus obliquus,

\pm *Acinetobacter calcoaceticus*, biodegradation, octane 2191.

Schefflera arboricola,

Pseudomonas cichorii dwarf blight 1162.

Scitophyllum commune,

cellulase, purification, amino acid sequence, characterization 7728.

cellulolytic enzymes, excretion, carbon sources, cellobiose, cellulose effects on 6874.

inorganic pyrophosphatase, purification, characterization, kinetics 5154.

Schizosaccharomyces acidoveratus,

mists fermentation, wine production, aroma compounds, organoleptic evaluation 6933.

Schizosaccharomyces pombe,

antibiotics production, morphology association 2255.

cell culture 7636.

animal production, D-xylulose conversion, feedback inhibition 3644.

β -glucans, biosynthesis, papulacanthin B, effects on 2223.

membranes, lipid composition, sterol composition, drug resistance relationship

3990.

peat hydrolysis, fermentation, ethanol production 6930.

purification, 3-phosphoshikimate 1-carboxyvinyltransferase, shikimate kinase,

shikimate dehydrogenase, 5-dehydroquinase synthase, 5-dehydroquinase 1800.

xylulose fermentation, ethanol production 5294.

D-xylulose fermentation, ethanol feedback inhibition 3589.

Schwanniomyces castelli,

single-cell protein, fermentation, starch 1721.

Schwanniomyces,

antibiotic sensitivity testing, genetics 5803.

Schwanniomyces castelli,

starch fermentation, factors affecting 197.

exo-1,4- α -D-glucosidase, α -amylase, production, optimization,

carbohydrates hydrolysis 5193.

Sciaridae,

infestation, culture, fruit bodies production, *Basidiomycetes* 7854.

infestation, pest control, fruit bodies production, culture, *Basidiomycetes* 7855.

Scilla tubergeniana,

yellows, *Xanthomonas campestris* pv. *hyacinthi* 2042.

Scitillation,

liquids, radioactive labelling, carbon-14, *Aspergillus nidulans* 5933.

Scirrhia acicola,

brown spot, *Pinus ponderosa* disease resistance, analysis methodology 3925.

Sclerocystis

population levels, roots colonization, plantations, *Coffea arabica* 5626.
spores, soil, Israel 6337.
Scleroderma aurantium,
ectomycorrhizas, inoculation, plantations, *Quercus robur*, *Quercus petraea* 7220.
Scleroderma graminicola,
downy mildew, disease control, metalaxyl, foliar applications, *Pennisetum americanum* 8137.
downy mildew, host-pathogen interactions, geographical variations, *Pennisetum americanum* 5431.
downy mildew, pathogenicity, comparison, isolates, Africa, Asia, host-pathogen interactions, *Pennisetum khipodes* 2796.
host-pathogen interactions, strains compatibility, sexual reproduction, geographical variations, downy mildew, *Pennisetum americanum* 7973.

Sclerotia

formation, *Aspergillus flavus*, ear rot *Zea mays* 8784.
Macrophomina phaseolina, soil levels, latent infection, *Euphorbia lathyris*, weeds, USA, Arizona 8044.
Rhizoctonia bataticola, soil inoculum, *Cicer arietinum* infection incidence 1976.
Rhizoctonia solani, biological control, *Verticillium biguttatum* treatment, *Lycopersicon esculentum* 325.
Sclerotinia sclerotiorum, antifungal activity, fluorophenylalanine 8310.
Sclerotinia trifoliorum, infection, *Trifolium pratense* seeds 7132.
Sclerotium rolfii, germination, factors affecting 6338.
Verticillium dahliae, characterization, pathogenicity, plant diseases 2023.
viability, soil solarization effects on, *Macrophomina phaseolina* 6302.

Sclerotinia

disease control, benomyl, crown rot, stem rot, *Medicago sativa* 5527.
Teratosphaeria oligocladium hyperparasitism, biological control, phytopathogenic fungi 975.

Sclerotinia minor

blight, *Arachis hypogaea*, South Africa 5410.

Sclerotinia sclerotiorum

disease control, vinclozolin, *Brassica napus* 2903.
fluorophenylalanine, antifungal activity, *Sclerotia* 8310.
pathogenesis, virulence, role pH, oxalic acid, levels, *Helianthus annuus* 2010.
stem rot, Glycine max, agricultural practices effects on pathogenesis 1120.
stem rot, wilt, planting timing effects on, *Cicer arietinum* 5412.
white mold, canopies effects on disease control, *Phaseolus vulgaris* 7930.

Sclerotinia trifoliorum

plant diseases, disease resistance, selection, *Medicago sativa* 5485.
sclerotia, infection, *Trifolium pratense* seeds 7132.

Sclerotium

root rot, disease control, soil amendment, sawdust, oil cake, *Triticum aestivum* 8068.

Sclerotium cepivorum

disease resistance, host range, Liliaceae 8043.
pesticide resistance, iprodione, vinclozolin, myclozolin, dicloran, quintozene 5529.
viability, iprodione resistance 8312.
white rot, disease resistance, *Allium cepa*, *Allium porrum*, screening projects 3865.

Sclerotium rolfii

antimicrobial activity, nematocides 1325.
Arachis hypogaea stem rot, epidemiology, factors affecting 6239.
crust disease, *Triticum aestivum*, soil fumigation + solar radiation effects on 8120.
damping-off, disease resistance, Philippines, *Nicotiana tabacum* 7179.
glyoxylate dehydrogenase (acylating), purification, characterization 3502.
mancozeb + curzate antifungal activity 2085.
phytopathogenic fungi, biological control, *Trichoderma parasitism*, ultrastructure 1213.

plant diseases, *Helianthus annuus*, biological control, *Trichoderma harzianum* 4586.
plant diseases, *Helianthus tuberosus*, effects on yield 5457.
root rot, wilt, *Eucalyptus*, incidence, greenhouses 8942.
sclerotia germination, factors affecting 5338.

sheath blight, pathology, *Sorghum bicolor* 4518.
soil-borne diseases, disease control, solar radiation 2845.
spore germination, carbendazim, treatment, effects on, *Saccharum officinale* 8127.
stem rot, *Arachis hypogaea*, spatial distribution, crop fields, USA, North Carolina 7134.
survival, soil, saprophytes 3943.

Scyltus ventralis

attack, association bacteria, wheat, *Abies* 5585.

Scombridae

seafood, smoke preservation, spoilage 8718.

Scopularopsis brevicaulis

biodegradation, wool, control, biocides 1288.
cellulase, production, composting, animal wastes 928.
drug sensitivity testing 5739.

Scorch

Kabatella caulivora, disease resistance, plant breeding, varieties, *Medicago* 6291.

Scorzonera hispanica

pathology, leafspot, *Alternaria scorzonerae* 8018.

Scrapie agent

purification, density gradients centrifugation 4985.

Screening projects

Ascochyta rabiei blight, *Cicer arietinum* 3787.
Ascochyta rabiei blight disease resistance, *Cicer arietinum* 3863.
blackleg disease resistance, *solanum tuberosum* 5483.
disease resistance, genetic analysis, *Lycopersicon esculentum*, speck, *Pseudomonas syringae* pv. *tomato* 5482.
disease resistance plant breeding, *Prunus persica*, inoculation methodology, *Cytospora leucostoma* 5487.

Scytalidium adaphilum

nutrient sources, *Sphagnum*, hydrolysates, single-cell protein, production 7879.

Scytalone

biosynthesis, *Phialophora lagerbergii*, acetic acid radioactive labelling 7785.

See water

bacteria biodegradation oil, continuous culture 1893.

Sea water, (continued)

media (culture), marine bacteria, biodegradation, putrescine, cadaverine 3676.
nitrification, filters, aquaculture 1668.
oil dispersants biodegradation, aquatic bacteria 1876.

sunlight, inactivation, *Escherichia coli*, pages 2402.

Seafood

Crassostrea virginica, spoilage, aerobic bacteria, anaerobic bacteria, pasteurization, packaging, cold storage, shelf life 8720.
food consumption, hepatitis A outbreaks, man 3691.
food contamination, yeasts 5343.
food contamination, yeasts, proteolytic enzymes, lipolysis 5340.
food poisoning, botulism 4486.
isolation, gram-negative bacteria, psychrophilic bacteria, *Melanogrammus aeglefinus* 8703.

Pisces, food contamination, yeasts 8712.

Scombridae, spoilage, smoke preservation 8718.

Vibrio parahaemolyticus isolation, growth optimization 194.

Seasonal variations

chloroplast ultrastructure, Abutilon, plant diseases, abutilon mosaic virus 4541.
drinking water contamination, *Aeromonas hydrophila*, clinical isolates correlation 8414.
nitrogen fixation, Frankia, symbiosis, *Alnus nepalensis* 6320.
nitrogenase activity, Frankia, nodules, *Myrica* glade 4607.
nitrogenase activity, *Oryza sativa* roots 5674.
rhizoplane microorganisms, *Fusarium*, Egypt 6335.
rotavirus levels, sewage 4897.

Vibrio cholerae enumeration, coastal waters, USA, California 6715.

Seasons

effects on *Septoria nodorum* sporulation, *Triticum aestivum* 5432.

Seawater

detection, rotavirus (simian) SA11, adsorption, methodology 4954.

Secale cereale

fungi T-2 toxin, HT-2 toxin, liquid chromatography assays 3739.
leaves culture, cultivars effects on *Puccinia graminis* f.sp. *tritici* 1991.
patch, *Rhizoctonia solani*, surveys, soils (calcareous) 255.
plant breeding, inheritance, disease resistance, leaf rust, *Puccinia recondita* f.sp. *tritici* *Puccinia recondita* f.sp. *secalis* 8907.
plant breeding, selection, disease resistance, powdery mildew, sporulation, measuring techniques 2827.
Puccinia graminis f.sp. *secalis* races virulence, North America 265.
× *Triticum*, leaves, stomata size distribution, *Puccinia recondita* rust incidence 7955.

3,4-Secolupane

derivatives, preparation, antibacterial activity 4739.

Secopheims

synthesis 6520.

Secretions

nasopharynx, detection, respiratory syncytial virus, use, immunoperoxidase test, man 3234.

Sectoring

Septoria nodorum, *Hordeum vulgare* isolates, role, pathogenicity, temperature effects on 1994.

Sedimentation

activated sludge, methanogenesis, methanogenic bacteria 3203.
aminooacyl-tRNA synthetase, yeasts 1801.
flocculation, bulking, mathematical models, activated sludge 6687.
waste treatment, equipment, agitation, yeasts 5848.

Sediments

aqueous environment, wastewater treatment, bacteria biodegradation monohalogenated biphenyls water pollution 3682.
bacteria enumeration, methodology, ultrasound, sediments 9305.
Clostridium perfringens spores, spatial distribution, indicator species, sewage, lakes 2388.
irrigation systems, detection, *Plasmodiophora brassicae*, role, *Brassica oleracea* var. capitata clubroot 3820.
lakes, anaerobic bacteria isolates, aromatic compounds biodegradation, dehalogenation pathways 2701.
lakes, coliforms enumeration, most probable number methodology 9319.
lakes, nitrification, measuring techniques, nitrapyrin, althylthiurea, nitrifying bacteria 8470.
marine environment, indicator species, isolation, *Streptococcus*, incubation temperature 8422.
microorganisms, analysis, cooling towers 561.
Rhizopora, bacteria biomass, community structure, fatty acids analysis 8989.
salt marshes, detritus lignocelluloses biodegradation, bacteria, fungi 6171.

Seed germination

Glycine max, *Rhizobium japonicum* growth, fungi pathogens, pesticides effects on 1212.
stimulation, *Agrobacterium radiobacter*, extracellular polymers, polysaccharides, seed treatments, *Lycopersicon esculentum* 6309.
Triticum aestivum, seed-borne fungi, metabolites, effects on 8798.

Seed rot

Botryodiplodia theobromae, *Lagenaria seceraria*, *Cucurbita pepo* 2032.
Pythium, *Pisum sativum*, biological control, use, *Trichoderma* 2779.
Pythium ultimum, biological control, *Penicillium oxalicum*, seed treatments, *Cicer arietinum* 8114.
Rhizoctonia bataticola, *Cicer arietinum*, phenols levels 1975.
Rhizoctonia bataticola infection screening, *Cicer arietinum* 1980.
Vigna radiata, *Phoma exigua*, pectinolytic enzymes, production 3797.

Seed treatments

benomyl, tabendazole, *Zea mays* 2094.
biological control, *Pythium ultimum*, damping-off, roots growth stimulation, *Beta vulgaris* 2891.
captan, benomyl, fungi, disease control, *Zea mays* 2093.
carbendazim, seed-borne diseases, *Vigna acutifolia* 8143.
carbendazim, *Rhizobium* inoculation, nodulation, *Glycine max* 2990.
disease control, damping-off, downy mildew, *Brassica* 8141.
Festuca arundinacea, *Acremonium coenophialum* infection, fungicides, disease control 1227.
Festuca arundinacea, disease control, *Epichloe typhina* infection 8119.
fungicides, disease control, leaf rust, stripe rust, *triticum aestivum* 2904.

Seed treatments, (continued)

fungicides, effects on, black point, *Alternaria alternata*, Triticale 8930.
 fungicides, effects on nodulation, nitrogen fixation, inoculation, *Bradyrhizobium japonicum*, Glycine max 8998.
 fungicides, prophylaxis, *Marsdenia brunnea* infection, *Populus deltoides* 2112.
 fungicides, seed-borne diseases, *Pinus wallichiana* 8177.
 fungicides, seed-borne diseases, *Shorea robusta* 8178.
 Glycine max, *Arachis hypogaea*, fungicides 1229.
 heat treatments, disease control, cowpea banding mosaic virus, *Vigna unguiculata* 2095.
 insecticides, chemical control, fungicides, Hordeum, *Rhizoglyphus maidis* 6317.
 Lobelia erinus, steam, disease control, *Alternaria tenuis* 2062.
 mancozeb, seed-borne diseases, *Cosmos* 8142.
 metalaxyl, efosite-AI, disease control, downy mildew, *Peronosclerospora sorghi*, *Sorghum bicolor*, Zea mays 8144.
 Penicillium oxalicum, biological control, *Pythium ultimum*, damping-off, seed rot, *Cicer arietinum* 8114.
Pseudomonas fluorescens, biological control, *Gaeumannomyces graminis* var. *tritici*, take-all, *Triticum aestivum* 336.
Pseudomonas siderophores, antagonism, pathogens, *Solanum tuberosum* 2831.
Pseudomonas striata, phosphate fertilizer applications efficiency, *Lens culinaris* 4620.
 streptomycin+erythromycin+benomyl, stimulation, *Bradyrhizobium japonicum*, rhizosphere colonization, Glycine max 9017.
 thiram, ethylmercuric chloride, seed-borne diseases, *Pinus roxburghii* 8176.
 X radiation, *Colletotrichum corchorum*, disease resistance, *Corchorus capsularis* 2905.

Seed-borne diseases,

Ascochyta fabae, Vicia faba 7136.
Ascochyta rabiei blight, *Cicer arietinum*, disease control, reviews 3905.
Ascochyta rabiei, disease transmission, *Cicer arietinum*, seedlings, disease control, benomyl, thiabendazole 1969.
 disease transmission, tobacco streak virus, *Fragaria vesca* 6267.
 disarium moniliiforme, colonization, Zea mays, irrigation effects on 7947.
 Phomopsis, seeds infection, harvesting dates effects on, Glycine max 8778.
 seed treatments, captan, carbendazim, *Vigna acotifolia* 8143.
 seed treatments, fungicides, *Shorea robusta* 8178.
 seed treatments, mancozeb, *Cosmos* 8142.
 seed treatments, thiram, ethylmercuric chloride, *Pinus roxburghii* 8176.
 seed-borne fungi, fungicides, seed treatments, *Pinus wallichiana* 8177.
 Septoria nodorum, seed infection, *Triticum aestivum* 2793.
 transmission (seed), brome mosaic virus, detection, immunodiffusion, enzyme-linked immunosorbent assay, immunoelectroblotting, seeds, *Triticum aestivum* 8787.
 transmission (seed), *Didymella bryoniae*, *Cucurbitaceae* 8036.

Seed-borne fungi,

Corospora canescens, detection methodology, *Phaseolus vulgaris* seeds 1676.
 metabolites, effects on, *Triticum aestivum*, seed germination, seedlings 8798.
 seed-borne diseases, *Pinus wallichiana* 8177.
 seed-borne diseases, seed treatments, captan, carbendazim, *Vigna acotifolia* 8143.
 seed-borne diseases, seed treatments, fungicides, *Shorea robusta* 8178.
 seed-borne diseases, seed treatments, mancozeb, seed-borne fungi 8142.
 seed-borne diseases, seed treatments, thiram, ethylmercuric chloride, *Pinus roxburghii* 8176.

Seedlings,

Abies fraseri, ectomycorrhizas, metalaxyl effects on growth 1234.
Abies fraseri, survival, overwintering, *Phytophthora cinnamomi* 1235.
Acacia dealbata, nodules, nitrogen fixation, *Rhizobium* 2906.
Beta vulgaris, Phoma betae infection, disease control 8851.
 Betula pendula, colonization, ectomycorrhizas, spreading, *Betula pubescens* 5558.
 Cicer arietinum, disease transmission, *Ascochyta rabiei*, disease control, benomyl, thiabendazole 1969.
Citrus aurantifolia tenuis albicans, disease control, fungicides 1219.
Citrus aurantium, Poncirus trifoliata+ *Citrus sinensis*, symbiosis, Gionius intraradices, photosynthates distribution association 8219.
 cold storage, *Basidiomycetes* infection, *Picea abies* 8175.
 colonization, ectomycorrhizas, basidiospores inoculum, *Betula pendula* 5559.
 colonization, ectomycorrhizas, *Psilotilus tinctorius*, soil, mines, *Pinus* 8931.
 colonization roots, ectomycorrhizas, culture systems, *Pinus* 7637.
 Coniferales, ectomycorrhizas formation, high-altitude environments, mines 5547.
 Coniferales, mycorrhizas, cold storage, ethylene, fungicides, effects on survival 5581.
Cucumis sativus, scab, *Cladosporium cucumerinum*, pathogenesis, role, proteinase 7178.
 downy mildew, *Peronospora parasitica*, turnip mosaic virus disease resistance, genetic analysis, *Brassica campestris* 2855.
 ectomycorrhizas inoculation, roots colonization, succession, spatial distribution, soil, *Betula* 5556.
 ectomycorrhizas inoculation, survival, transplantation, *Pinus caribaea* 5569.
 ectomycorrhizas, ectomycorrhizas, *Quercus imbricaria* 5584.
 Ectomycorrhizas, grandis, stem cancer, *Cylindrodium scoparium*, disease control 6324.
 Fraxinus americana, growth, vesicular-arbuscular mycorrhizas inoculation effects on 5548.
 growth, *Gomora mosseae* inoculation stimulation, *Malus domestica* 3942.
 growth, stimulation, colonization, soil microorganisms, *Hordeum vulgare* 3936.
 growth stimulation, ectomycorrhizas inoculation, *Picea sitchensis* 5565.
 immersion, water temperature, effects on roots colonization, ectomycorrhizas, disease control, *Phytophthora cinnamomi*, *Pinus radiata* 7219.
 inoculation, ectomycorrhizas, *Psilotilus tinctorius*, stimulation, roots growth, *Pinus taeda* 3908.
 inoculation, vesicular-arbuscular mycorrhizas + Azotobacter chroococcum, nitrogen fixation, yield, *Lactuca sativa* 6375.
 Macrozamia communis, nodulation, symbionts 2907.
 Medicago sativa, fungi diseases, greenhouses, USA, California 1115.
 nodulation, actinorrhizas, propagation, inoculation, seedlings, *Alnus crispa* 8154.
 Oryza sativa, disease resistance, Drechslera sorokiniana inoculation 7201.
 Oryza sativa, Helminthosporium oryzae brown spot, disease control, phytoalexins inducers 3867.
 Phytophthora cactorum crown rot, biological control, *Bacillus subtilis* antagonism, *Malus pumila* 7212.
Picea sitchensis, inoculation, *Telephora terrestris*, silviculture 345.
 Pinus banksiana, inoculation, mycelia, ectomycorrhizas 7227.
 Pinus banksiana, inoculation, mycelia, ectomycorrhizas 7228.
 Pinus caribaea var. hondurensis, Ganoderma lucidum inoculation, pathogenicity 3922.
Pinus echinata, Cronartium quercum f.sp. fusiforme infection susceptibility 5591.
Pinus elliotii var. *elliottii*, stems lesions, fusiform rust, Cronartium quercum f.sp. fusiforme 7234.
Pinus ponderosa, geographical variations, susceptibility, rust, Endocronartium harknessii 8945.
Pinus sylvestris, ectomycorrhizas, inhibition, non-target organisms, mancozeb, paraquat 5570.
Psilotilus tinctorius inoculation, nutrient uptake, phosphorus, nitrate, *Quercus rubra* 8935.
Pseum sativum, population dynamics, *Rhizobium leguminosarum* 8233.
 plant breeding, growth, Sphaerotheca pannosa powdery mildew disease resistance, Rosa multiflora 8904.
 planting, inoculation, ectomycorrhizas, *Picea sitchensis* 5566.
 plants, infection, *Rhizoctonia solani*, *Pithium debaryanum*, disease control, cyanamide 3886.
Pseudotsuga menziesii, silviculture, root rot, *Phytophthora*, disease control, metalaxyl 8927.
Pseudotsuga menziesii, Thuja plicata, mycorrhizas growth, forests litter effects on 5546.
Shorea, ectomycorrhizas, Malaysia 7230.
Solanum tuberosum, plant viruses, maintenance, symptoms, distribution 8865.
Sorghum, nitrogen cycle measurements, free-living bacteria 8967.
 survival, Coniferales roots, *Psilotilus tinctorius* spores inoculation 5607.
Triticum aestivum, disease resistance plant breeding screening projects, wheat mosaic virus 4574.
Triticum aestivum, glume blotch, *Septoria nodorum*, factors affecting 7149.
Triticum aestivum, leaves, *Fusarium roseum* inoculation, pathogenicity 7151.
Triticum aestivum, linkage analysis, *Puccinia rust* 258.
Triticum aestivum, seed-borne fungi, metabolites, effects on 8798.
Triticum aestivum, *Septoria nodorum* glume blotch, disease resistance components 302.
Vigna unguiculata, mixed infection, *Fusarium oxysporum* + sunn hemp mosaic virus, plant breeding effects on pathogenesis 6234.
 Zea mays, endospores, mutants, *Fusarium moniliforme* infection, effects on 3804.

Seedlings, (continued)

Seeds,
Arachis hypogaea, *Aspergillus flavus* colonization, disease resistance, cultivars comparison 7086.
Bradyrhizobium japonicum inoculation, planting, nodulation, Glycine max 6352.
 Brassica, isolation, *Xanthomonas campestris* pv. *campestris*, media (selective) 4199.
 contamination, *Aspergillus restrictus*, enzymes, production, association, water activity, detection 1166.
Cucumis sativus, baiting substrates, soil-borne diseases, disease reservoirs, *Pythium aphanidermatum* 8763.
Daucus carota, *Alternaria dauci* persistent infection, fungicides, antifungal activity 1226.
 dispersal, survival, damping-off, *Platypodium elegans* 1240.
 Eleusine coracana, isolation, Drechslera plurisetata, taxonomy, morphology 8048.
Fusarium moniliforme infection, disease resistance, plant breeding, Zea mays 8074.
 Glycine max, extracts effects on, Saccharomyces cerevisiae cell culture 5089.
 Glycine max, floral flora, detection, pH, water 289.
 Glycine max, *Rhizobium japonicum* pelleting, Saudi Arabia 2953.
 Glycine max, seed germination, *Rhizobium japonicum* growth, fungi pathogens, pesticides effects on 1212.
Gossypium hirsutum, aflatoxins 1932.
Gossypium hirsutum, meals, food contamination, aflatoxins, detoxification methodology 7081.
Helianthus annuus, mycorrhiza, aflatoxins detection, Argentina 7061.
Helianthus annuus, survival, macrophomina phaseolina, pathology 8026.
 Hordeum vulgare, barley stripe mosaic virus, infection, effects on, yield 4516.
 infection, *Cynvaria*, *Alternaria alternata*, *Cosmos* 8829.
 infection, *Septoria nodorum*, seed-borne diseases, *Triticum aestivum* 2793.
 Lepidium sativum, *Pythium ultimum* damping-off, biological control, *Pythium oligandrum* 974.
 Medicago sativa, germination, *Rhizobium meliloti* growth, Verticillium wilt, fungicides effects on 1211.
 microorganisms, infection, pathology, conferences, books 3398.
 nitrogen-15 translocation, leaves, *Bradyrhizobium japonicum* nitrogen fixation inhibition, Glycine max 6370.
 oils, Annona squamosa, Azadirachta indica, vectors, rice tungro virus, pest control, Nephrotettix virescens, Oryza sativa 6299.
 oils, Butea monosperma, antimicrobial activity, phytopathogenic fungi, bacteria 4782.
 oils, effects on *Aspergillus parasiticus* aflatoxins biosynthesis 3747.
 oils, extraction, proteolytic enzymes, *Bacillus subtilis*, *Brassica napus*, Glycine max 3494.
 peanut mottle virus infection, enzyme-linked immunosorbent assay screening, transmission (seed), *Arachis hypogaea* 8769.
Phaseolus vulgaris, *Corospora canescens*, seed-borne fungi, detection methodology 1676.
 Phomopsis infection, harvesting dates effects on, seed-borne diseases, Glycine max 8778.
 protein composition, Glycine max, *Bradyrhizobium japonicum* strains inoculum, nitrogen fixation, nodulation 8247.
 seed-borne diseases, transmission (seed), brome mosaic virus, detection, immunodiffusion, enzyme-linked immunosorbent assay, immunoelectroblotting, *Triticum aestivum* 8787.
 Sesamum indum, fungi, pathology 8837.
 Trifolium pratense, infection, Sclerotinia trifoliorum sclerotia 7132.
 Trifolium vesiculosum, toxicity, *Rhizobium leguminosarum* var. *trifolii* survival 8994.
 yield, *Bradyrhizobium japonicum* inoculation effects on, genetic variance, inheritance, Glycine max 5660.
 yields, Lolium perenne, fungicides applications, disease control 8108.
 Zea mays, detection, *Peronosclerospora sorghi*, asospores 7964.
 Zea mays, fungi infection, climatic conditions 1992.
 Zea mays, Gibberella zeae, Nigrospora oryzae, symptomless infection, role, *Pythium debaryanum* infection 8792.
 Zea mays hybrids, *Aspergillus flavus* growth, aflatoxins biosynthesis 8083.
 Zea mays, levels, fusiococcin, infection, *Fusiococcum amygdali* 8740.

- Selridium chloride**,
canker, disease resistance, plant breeding, *Cypripedium sempervirens* 2870.
- Seleniadiazolyl-phenylhydrazones**,
antibacterial activity, antifungal activity 1321.
- Selenazofurin**,
synergism, ribavirin, antiviral activity 9116.
synergism, ribavirin, tiazofurin, antiviral activity, togavirus, bunyavirus, arenavirus 9117.
- Selenium**,
containing amino acids, L-methionine γ -lyase synthesis, *Pseudomonas putida* 65.
volatilization, soil microorganisms 7261.
- soil pollution, effects on soil microorganisms biodegradation glucose, calorimetry 2933.
- Selenomonas ruminantium**,
growth, fermentation, chetomin, effects on 2315.
- Self-purification**,
soil pollution, biodegradation, soil microorganisms 4633.
- Seliberia**,
reactors, cutting fluids biodegradation, bacteria identification 178.
- Semen**,
antibacterial activity 7361.
cattle, isolation, Mycoplasma, Ureaplasma, antibiotic sensitivity testing 7473.
- Semiarid environments**,
ecological evaluation, vesicular-arbuscular mycorrhizas, USA, California 8222.
total environment, urease, soil microorganisms, soil temperature, soil moisture effects on 8239.
- Semliki Forest virus**,
antiviral activity, interferon, cell culture 7389.
antiviral activity, tetrahydro-2(1H)-pyrimidinone derivatives, structure-activity relationships 8321.
- Sensal virus**,
antiviral activity, cell culture, herbal medicines, *Alternanthera philoxeroides* 7392.
envelopes, use gene transfer carriers, mammalian cells 630.
proteins, purification, high-performance liquid chromatography, use vaccines 5649.
- Sensescence**,
Hordeum vulgare, effects on take-all, *Gaeumannomyces graminis* var. *tritici* 7954.
- Sensors**,
carbon dioxide, dissolved oxygen, monitoring, fermentation 6114.
electrodes, biotechnology 6732.
ethanol levels, fermentation, computer applications 3635.
ethanol monitoring, fermentation, *Saccharomyces cerevisiae* 4419.
fermentation, glucose, sucrose, fructose 3530.
gases, electrodes, measuring techniques, *Saccharomyces cerevisiae* ethanol production 1868.
glucose, fermentation 3531.
- Sepsis**,
experimental infection, oxytocin antibiotic synergism, antibacterial activity, clinical trials 6585.
- Septic tanks**,
effluents, disinfection, heat+hydrogen peroxide 9243.
- Septicemia**,
detection, liquid culture methodology, man 2466.
diagnosis, blood culture, Gram stain, subculture, acridine orange staining 3342.
diagnosis, blood culture, lysic centrifugation, man 5032.
- Septotulidium elegantulum**,
leafspot, *Eichhornia crassipes* 8818.
- Septoria**,
disease resistance plant breeding, *Vigna unguiculata* 8898.
infection, *Triticum aestivum*, *Hordeum vulgare*, reviews 1985.
- Septoria cucurbitacearum**,
leafspot, *Cucurbita pepo*, new records, British Isles 5452.
- Septoria eleagni**,
leafspot, *Elaeagnus angustifolia*, epidemiology, etiology 7989.
- Septoria nodorum**,
blotch, *Triticum aestivum*, incidence, USA, Michigan 5419.
disease resistance, *Triticum* 1197.
glume blotch, disease resistance components, *Triticum aestivum* seedlings 302.
glume blotch, disease resistance, plant breeding, *Triticum aestivum* 2833.
glume blotch, *Triticum aestivum* seedlings, factors affecting 7149.
Hordeum vulgare isolates, sectoring, role, pathogenicity, temperature effects on 1994.
infection, *Triticum aestivum*, Aphididae, honeydew, enhancement 3806.
infection, *Triticum aestivum*, yield 7948.
seeds infection, seed-borne diseases, *Triticum aestivum* 2793.
sporulation, growth stage, seasons, temperature effects on, *Triticum aestivum* 5432.
virulence, *Hordeum vulgare*, *Triticum aestivum* 7148.
- Septoria spraguel**,
plant diseases, incidence, *Elymus junceus*, host range 1134.
- Septoria tritici**,
blotch, *Triticum aestivum*, incidence, USA, Michigan 5419.
leaf blotch, pathogenesis, *Triticum* germplasm analysis 257.
leaf blotch, *Triticum aestivum*, disease control, use, antitranspirants 291.
- Septoria vignicola**,
leafspot, pathogenesis, *Vigna sinensis*, role, relative humidity 8779.
- Serine**,
residues, subtilisin active sites, tryptophan residues distance, fluorescence, bacteria 899.
- L-Serine**,
bacteria, biosynthesis enhancement, L-serine analogues resistant mutant 1705.
- D-Serine dehydratase**,
biosynthesis, *Escherichia coli* 3504.
- Serine proteinase**,
active sites flanking regions, amino acid sequence, *Bacillus thuringiensis* comparison *Bacillus cereus* 5153.
interaction oxymino-cephalosporins, structure-activity relationships, *Streptomyces* 6832.
proteinase inhibitor complex, X-ray crystallography, *Streptomyces griseus* 20.
- Serine proteinase, (continued)**
purification, characterization, cell membranes, *Bacillus subtilis* 1783.
Streptomyces rutgersensis, phenylmethylsulfonyl fluoride dyflos inhibition 2584.
- Serological tests**,
Aspergillus fumigatus antibodies detection 5930.
comparison, rubella, seroepidemiology, surveys, man 4978.
vaccines, standardization, chickens 5036.
- Serotyping**,
agglutination, Phadebat test, *Haemophilus influenzae* 5066.
Agrobacterium tumefaciens, crown gall, rootstocks, *Malus pumila* 270.
antibiotic sensitivity testing, clinical isolates, *Streptococcus pneumoniae* 9153.
antigen O, latex agglutination, *Klebsiella* 9320.
Campylobacter fetus subsp. *jejuni*, fluorescent antibody test, comparison, passive hemagglutination 3293.
Campylobacter fetus subsp. *jejuni*, methodology 762.
Campylobacter fetus subsp. *jejuni*, methodology, agglutination, 725.
Enterobacteriaceae, use, blood group O, antigens 3296.
Escherichia coli, enterotoxins detection methodology, Vero cells 3345.
Haemophilus pleuropneumoniae, animal isolates, use, agglutination 2516.
herpes simplex virus clinical isolates, protein A immunoassays 595.
herpes simplex virus, immunofluorescence, comparison, monoclonal antibodies, 2-bromovinyl-2'-deoxyuridine, sensitivity, methodology 655.
herpes simplex virus, monoclonal antibodies 601.
infectious bronchitis virus, hemagglutination inhibition 9280.
Klebsiella, epidemiology, antibiotic resistance 445.
Legionella pneumophila, use, monoclonal antibodies, hybridoma production 2518.
Neisseria gonorrhoeae, antibiotic sensitivity testing, gonorrhea epidemiology, man 482.
rotavirus, immunoelectron microscopy 4966.
Salmonella, automated methods 2506.
Salmonella, contamination, sewage sludge, *Larus ribundus* feeding association, excretion relationship 9245.
Staphylococcus aureus, enterotoxins production, phage typing, clinics, foods 4479.
Streptococcus agalactiae, methodology 9322.
Streptococcus pneumoniae, use, agglutination, comparison, counter immunoelectrophoresis 3312.
Ureaplasma urealyticum, methodology 733.
- Serpentes**,
bacteria, animal isolates, in vitro, in vivo, antibacterial activity, ceftazidime 5766.
- Serpula lacrymans**,
dry rot, biodeterioration, wood, Switzerland 1247.
- Serratia**,
clinical isolates, antibacterial activity, bactericidal activity, dibekacin, gentamicin, tobramycin 6540.
 β -lactam antibiotics antibiotic resistance, β -lactamase role 438.
levels, grain dust, gram-negative bacteria 7109.
media (isolation), fresh water 7536.
netilmicin sensitivity 6401.
- Serratia marcescens**,
antibacterial activity, antibiotic K-4619 7479.
antibacterial activity, aztreonam, antibiotic synergism 6504.
antibacterial activity, mezlocillin, piperacillin, azticillin 7431.
antibacterial activity, WIN 49375 9091.
antibiotic resistance, moxalactam, β -lactamase, membrane permeability, penicillin-binding protein 3038.
antibiotic resistance, plasmids analysis 4000.
antibiotic sensitivity testing, ampicillin, amoxycillin 2198.
antibiotic synergism antibacterial activity, β -lactam antibiotics + amikacin 1391.
bactericidal activity, bactericides, hemocoe body fluids, *Glycera dibranchiata* 451.
carbencillin, antibiotic resistance 447.
clinical isolates, antibiotic resistance, cross-resistance, cefotaxime, amikacin 4687.
clinical isolates, azlocillin antibiotic resistance 5715.
clinical isolates, norfloxacin, antibacterial activity 4752.
conjugation, plasmids, antibiotic resistance, *Klebsiella pneumoniae* 4716.
histidine biosynthesis, stabilization mechanisms 5971.
identification methodology, agglutination use 1640.
immobilized cells, electrodes, asparaginase, detection 6777.
 β -lactamase, biosynthesis, inducers, correlation, penicillins, antibacterial activity 2261.
maridomycin conversion, antibacterial activity 3161.
norfloxacin drug sensitivity tests 9035.
pathogens, toxicity, biological control, *Solenopsis richteri*, *Solenopsis invicta* 5257.
prodigiosin biosynthesis, polymyxin B effects on 1404.
proteinase, purification, characterization 8519.
proteinase, purification, characterization, clinical isolates 1779.
rhizoplane microorganisms, phosphorus, nitrogen, effects on, association Graminae 6334.
serum bactericidal activity, aztreonam, \pm cefoperazone, \pm amikacin 8344.
- Serum**,
antibodies, enterovirus, detection, radioimmunoassay 6448.
 α antigen detection, enzyme-linked immunosorbent assay methodology, man 8456.
assays, *Staphylococcus aureus*, bactericidal activity, nafcillin, tobramycin, gentamicin, treatment, rabbits 478.
azocillin, high-pressure liquid chromatography 509.
ceftazidime, high-pressure liquid chromatography 500.
Clostridium tetani antitoxins detection, enzyme-linked immunosorbent assay, neutralization, man 4488.
infection, mycotoxins, use, antibodies, reviews 7082.
detection, varicella-zoster virus antibodies, use, anti complement immunofluorescence, man 1566.
enterovirus detection, enzyme-linked immunosorbent assay methodology, man 5010.
herpes simplex virus seroepidemiology, man, enzyme immunoassay 614.
herpesvirus (equine) 1 detection, neutralization, hemagglutination inhibition, hemolysis, horses 608.
Japanese encephalitis virus, immunoglobulin M, immunoglobulin G, enzyme-linked immunosorbent assay, experimental infection, pigs 50011.
L-lactic acid analysis, use lactate 2-monoxyphenylase immobilization 7748.
man, *Haemophilus influenzae* b polyribose phosphate antigens detection, agglutination tests 1584.
man, rubella virus antibodies detection, latex agglutination methodology 1539.

Serum, (continued)

- netilmicin, immunoassays 530.
pigs, *Brucella abortus* antibodies detection, enzyme-linked immunosorbent assay methodology 5063.
Streptococcus group B antibodies, enzyme-linked immunosorbent assay methodology, man 3259.
tests, toluidine red, diagnosis, syphilis, man 2511.
vancomycin, high-pressure liquid chromatography 8366.

Serum bactericidal activity,

- antibiotic sensitivity testing, *Staphylococcus aureus*, media comparison, infection, man 4788.
aztreonam, cefepime, amikacin, *Escherichia coli*, *Klebsiella pneumoniae*, *Serratia marcescens*, *Pseudomonas aeruginosa* 8344.
Vibrio cholerae, measuring techniques, bioluminescence 489.

Serum proteins,

- binding, antibiotics 8347.
binding, lumirymcin, cattle 7474.

Sesamum indium,

- seeds, fungi, pathology 8837.

Sesbania rostrata,

- nodules calluses, *Rhizobium* infection, pathogenesis 3798.

Sesbania sericea,

- disease reservoirs, host alternation, rust, *Phakopsora pachyrhizi* 7940.

Sesquiterpenes,

- antifungal activity 5742.
antifungal activity, *Microsporium cookei*, *Trichophyton mentagrophytes*, *Fusarium* 8317.
plant extracts, antibacterial activity, structure-activity relationships, gram-negative bacteria, gram-positive bacteria 6446.
terreosol acid A, biosynthesis, *Aspergillus terreus* 7475.

Sewage,

- bacteria isolates, antibiotic resistance, chlorination effects on 6437.
contamination water, *Salmonella* isolation, media (enrichment) methodology 9259.
enterovirus, inactivation, role, ozone 4928.
indicator species, *Clostridium perfringens* spores, spatial distribution, sediments, lakes 2388.
land disposal, association, pollution, wastewater treatment 8400.
phages enumeration methodology 8420.
rotavirus levels, seasonal variations 4897.
transport, survival, poliovirus 1, ECHOvirus 1 5828.
water isolates, bacteria, biodegradation, isopropyl N-phenylcarbamate, 2,4-D 5945.
water pollution, streams biodegradation, aeration, water treatment 8410.

Sewage effluents,

- disinfection 1500.
ions effects on poliovirus adsorption, soil 4934.
microbial pollution, indicator species, hydrology, estuaries 6710.
peracetic acid disinfection, enterovirus, rotavirus, phages 6695.
poliovirus 1, chlorine, synergism, chlorine dioxide, ozone, peracetic acid, poliovirus 1 6694.
Salmonella typhi isolation, swabs 6717.
water quality, viruses 9254.

Sewage outfalls,

- microbial pollution, indicator species, coastal waters 6711.
Streptococcus group D enumeration, identification, antibiotic susceptibility testing 2256.

Sewage sludge,

- acetic acid, digestion (anaerobic), methanogenesis, inhibition, 2-bromoethanesulfonate 7524.
anaerobic bacteria isolates, aromatic compounds biodegradation, dehalogenation pathways 2701.
applications, soil, hydrocarbons, biodegradation, microorganisms, role 4686.
bacteria, biodegradation, digestion (anaerobic), measuring techniques 4438.
bulking, filamentous microorganisms, activated sludge 2343.
carboxenol, biodegradation, bacteria 2703.
composting 4098.
composting 5833.
composting 5834.
composting, aeration 5832.
composting, aeration, bulking agents, tires 4082.
composting, anaerobic conditions, methanogenesis 4102.
composting, *Aspergillus fumigatus* air spora recovery 3213.
composting, books 5090.
composting, developing countries 5835.
composting, microorganisms, succession, temperature, effects on 5819.
composting, C/N ratios monitoring 5841.
composting, pathogens inactivation 5839.
composting, pathogens inactivation, monitoring 5840.
composting, ponds, nutrient sources, phytoplankton 6689.
composting, respiration monitoring 5842.
composts, soil amendment, disease control, fungi, crops 5488.
composts, soil amendment, disease control, soil amendment 311.
crop residues, *Oryza sativa*, composting, actinomycetes, aerobic bacteria, cellulolytic bacteria 7492.
digestion (aerobic), environmental hygiene 2366.
digestion (aerobic), indicator species mortality, temperature 1485.
digestion (anaerobic), alkalinity monitoring 1477.
digestion (anaerobic), pasteurization, land disposal 2351.
digestion (anaerobic), pathogens, *Salmonella*, combustion, pollution control 2368.
digestion (anaerobic), pH, organic acids effects on 2352.
disease control, soil amendment, crown gall, *Rubus* 310.
disinfection, biotechnology 2364.
disinfection, conferences, books 2542.
disinfection, pathogens, environmental hygiene 2365.
disposal sites, viruses survival, Atlantic Ocean 9242.
focal calcium reduction, calcium oxide, land disposal 2375.
fertilizer applications, *Brassica caulorapa* quality, nitrogen cycle 2997.
land disposal, public health, pathogens, viruses, *Escherichia coli* 2367.
methanogenic bacteria incidence 4134.
ocean dumping, indicator species, marine pollution 2389.
odors, deodorization, chemicals treatment 9247.
radiation, disinfection 551.
 γ radiation disinfection, coliforms, *Pseudomonas*, *Bacillus* 5823.
Salmonella contamination, *Larus ribundus* feeding association, excretion relationship, serotyping 9245.
Salmonella isolation, methodology comparison 9231.

Sewage sludge, (continued)

- solid wastes, composting 3199.
+ *Spirulina maxima* biomass, digestion (anaerobic), methanogenesis 1293.
thermophilic bacteria diversity, thermodynamics association 546.
viruses microbial pollution, land disposal, reviews 2335.
waste treatment, thermophilic microorganisms 1465.

- waste treatment, carbon (activated), assays, biomass suspended matter 2379.

Sewage treatment,

- activated sludge 5826.
activated sludge, kinetics, mathematical models 2381.
aeration column, bacteria media (culture), oxygen adsorption rates 3291.
bacteria, viruses, public health 2363.
digestion (anaerobic), mechanisms 3189.
lagoons, heterotrophic bacteria, indicator species, population dynamics 9241.
malachite green, staining, detection, bacteria 2331.
microorganisms role, books 2540.
phages, coliforms, indicator species, water pollution 4943.
recreation sites, composting, USA, Vermont 4922.
Subaromyces splendens, role, percolation filters 1460.
use microorganisms, reviews, books 5093.

Sexual reproduction,

- Bremia lactucae*, virulence genes, recombination, linkage, host-pathogen interactions, disease resistance genes, *Lactuca sativa* 2840.
Sclerospora graminicola, strains compatibility, geographical variations, downy mildew, *Pennisetum americanum* 7973.

Sexually-transmitted diseases,

- diagnosis, *Chlamydia trachomatis* isolation, media (transport), swabs, man 5037.
Neisseria gonorrhoeae isolates, antibiotic sensitivity testing 5752.

Seychelles,

- plant diseases geographical distribution, pathogens host range 5398.

Shading,

- Cercospora coffeicola*, eyespot, anthracnose, plantations, *Coffea arabica* 273.
seasonal variations, *Cercospora coffeicola*, eyespot, anthracnose, plantations 273.

Shake culture,

- Penicillium cyclopium*, glass containers silicone coatings effects on adherence 835.
Streptomyces albus, glucosylphosphate isomerase biosynthesis 3520.

Shales,

- industrial effluents, bacteria survival 4135.
oil recovery, reviews, hydrocarbon-degrading bacteria 8286.

Sheath blight,

- Rhizoctonia solani*, disease control, benzylotryptidazones, *Oryza sativa* 5534.
Rhizoctonia solani, disease control, dipiramicin A, dipiramicin B, *Oryza sativa* 4863.
Rhizoctonia solani, disease resistance, *Oryza sativa* 7147.
Rhizoctonia solani, interaction, *Nilaparvata lugens*, infection, *Oryza sativa*, varieties 8789.
Sclerotium rolfsii, *Gloeosporangium sorghi*, pathology, *Sorghum bicolor* 4518.

Sheep,

- Bacteroides nodosus* pili vaccines, purification, characterization, immunogenicity 3185.

- Brucella ovis* antibodies, complement fixation comparison enzyme-linked immunosorbent assay, detection 4204.
cattle, nutritive value, single-cell protein, *Saccharomyces cerevisiae*, silage preservatives 2747.

- Chlamydia* infection, agglutination immunodiagnosis 2504.
feces isolates, *Escherichia coli* antibiotic resistance 7321.
Pasteurella haemolytica+*Clostridium* vaccines, efficacy, experimental infection, gutrotiotics (specific pathogen free) 7488.
slurries, feeds, contamination, *Staphylococcus*, coliforms, *Salmonella* 7018.
straw digestibility, silage, urea treatment 1067.
wool, *Pseudomonas* isolation, proteinase, electrophoretic mobility 1753.

Sheff life,

- dairy products, β -D-glucosidase activity effects on, *Pseudomonas fluorescens* 6197.
milk, coliforms spoilage, organoleptic evaluation, off flavor 4448.
milk, pasteurization, refrigeration, proteolytic enzymes, bacteria spoilage 6175.
pasteurization, packaging, cold storage, seafood, *Crassostrea virginica* 8720.
poultry, meat products, spoilage, psychrotrophic bacteria, temperature 6972.
predictions, bacteria spoilage, refrigeration, milk 6174.

Shells,

- Crassostrea gigas*, minerals, bacteria, biodegradation 4439.

Sherry,

- production, *Saccharomyces starter* cultures 993.

Shigella,

- antibacterial activity, ciprofloxacin 4744.
antibiotic resistance, R factor, role 6438.
cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1388.
detection methodology, diarrhea, man 5921.
diarrhea, disease control, association, water supplies, sanitation, man 7529.
identification, AutoMicrob test 1645.
in vitro antibiotic sensitivity testing, nosocomial environment clinical isolates 6502.

- indicator species, inactivation, waste water, marine environment 1499.
media (isolation), sodium + RNA containing 9326.

- shigellosis, infection, laboratories, man 2414.

Shigella boydii,

- antigens, lipopolysaccharides, carbohydrate composition, structure 4362.
Shigella dysenteriae,
antibiotic resistance, R factor, role 6438.
antigen O, polysaccharides structure 1827.
clinical isolates, drug resistance, antibiotic resistance 4715.
like toxins, biosynthesis, *Vibrio cholerae*, *Vibrio parahaemolyticus* 3758.
like, toxins, *Escherichia coli*, purification, characterization 6211.
polysaccharides, structure, antigenicity 4363.

Shigella flexneri,

- antibiotic resistance, R factor, role 6438.
Carica papaya plant extracts antibacterial activity 2220.
cotrimoxazole resistance 6425.
drug resistance, virulence, immunogenicity, vaccines 4080.
lipid A fractions, enzyme-linked immunosorbent assay, thin-layer chromatography 5064.
lipopolysaccharides, oligosaccharides biosynthesis 1834.
trimethoprim derivatives, antibacterial activity 1333.

- Shigella flexneri**, (continued)
triaccharides synthesis, antigens fragments 6050.
- Shigella sonnei**,
antibiotic resistance, physicochemical properties, plasmid pKMR 4694.
antibiotic resistance, R factor, role 6438.
clinical isolates, cotrimoxazole drug resistance 5710.
clinical isolates, identification, colicin typing 7612.
Inc plasmids, R factors, antibiotic resistance 4691.
Salmonella typhi association, vaccines, antigenicity, safety 4890.
trimethoprim derivatives, antibacterial activity 1333.
- Shigellosis**,
infection, laboratories, man 2414.
- Shikimate dehydrogenase**,
purification, *Schizosaccharomyces pombe* 1800.
- Shikimate kinase**,
purification, *Schizosaccharomyces pombe* 1800.
- Shoot blight**,
Botrytis cinerea, fungicides, disease control, *Pistacia vera* 2896.
- Shoots**,
culture, gram-negative bacteria, antibiotics decontamination, trees 5762.
tissue culture, infected *Solanum tuberosum*, potato virus X, potato virus S,
benomyl effects on 8001.
weight, *Vigna unguiculata*, relationship, nitrogen fixation, genotypes screening
association 9000.
- Shores**,
seedlings, ectomycorrhizas, Malaysia 7230.
- Shores robusta**,
seed-borne fungi, seed-borne diseases, seed treatments, fungicides 8178.
- Shrubs**,
indigenous species, introduced species, nitrogen fixation, rangelands 501 7271.
- Sialoglycoproteins**,
horses erythrocytes, use, latex agglutination, Epstein-Barr virus Paul-Bunnell
antibody detection 1563.
- Side acuta**,
plant diseases, okra mosaic virus, epidemiology, Nigeria 6262.
- Side micrantha**,
cytopathology, abutilon mosaic virus 8815.
- Siderophores**,
amino acid sequence, *Pseudomonas* 8518.
bacteria, assays, colorimetry, methodology, in vitro 661.
biosynthesis, *Vibrio* 867.
enhancement, *Bacillus megaterium*, copper toxicity 6444.
hydroxamic acid, incidence, soil, *Escherichia coli* bioassays 675.
Pseudomonas, antagonism, pathogens, seed treatments, *Solanum tuberosum* 2831.
Pseudomonas, antagonism, phytopathogenic fungi, *Erwinia*, rhizosphere, *Solanum
tuberosum* 2830.
requirements, soil, bioassays, *Salmonella typhimurium* 375.
structure, *Pseudomonas aeruginosa* 870.
- Sigmatoka**,
disease resistance, plant breeding, *Musa*, *Mycosphaerella fijiensis* var. *difformis*
3870.
Mycosphaerella fijiensis var. *difformis*, Honduras, *Musa paradisica* 8806.
- Sigmoid A**,
Erythrina sigmoidea, antibacterial agents, isolation, new records 1328.
- Sigmoidin B**,
Erythrina sigmoidea, antibacterial agents, isolation, new records 1328.
- Silages**,
astaxanthin pretreatment effects on fermentation, *Zea mays* 4467.
astaxanthin extraction, food processing wastes, *Procambarus clarkii* 2714.
corn, biodegradation, microorganisms, aerobic conditions 5360.
corn, fermentation, ammonia preservation 2744.
crop residues, cellulolytic enzymes, pectinolytic enzymes, microorganisms 213.
fermentation, acid production, lactic acid bacteria, *Zea mays* 7873.
fermentation, acid production, water content, time effects on, *Medicago* 2745.
fermentation, animal wastes, nutritive value, feeds, pigs 7019.
fermentation, effects on digestibility, *Zea mays*, crop residues, cattle 7877.
fermentation, effluents, wastewater treatment 6683.
fermentation, lactic acid bacteria 7013.
fermentation, lignocelluloses, feeds production, tropical environment, Gramineae
5358.
fermentation, mycotoxins biosynthesis, growth, *Fusarium roseum*, *Fusarium
tricinutum*, *Lolium perenne* 5369.
inoculum, lactic acid bacteria 7012.
lactic acid bacteria inoculation, fermentation, *Zea mays* 7876.
Lactobacillus plantarum inoculation, whey, crop residues, *Gossypium hirsutum*
2743.
maize acid metabolism, lactic acid bacteria 6200.
organic acids, salts, antimicrobial activity, bacteria, fungi 6489.
preservatives, *Saccharomyces cerevisiae* single-cell protein, nutritive value,
cattle, sheep 2747.
production, bacteria, yeasts 5350.
production, fermentation, industrial wastes, fishery products, lactic acid
bacteria 2753.
proteolysis 1068.
straw digestibility, urea treatment, sheep 1067.
Zea mays, spoilage, microorganisms, γ radiation prevention 6202.
- Silica**,
absorption, *Escherichia coli*, proteins, concentration, purification, methodology
7668.
supports, immobilized cells, ethanol fermentation, cross-flow bioreactors,
Saccharomyces cerevisiae 3605.
- Silicon**,
biogeochemistry, microorganisms, reviews 8207.
- Silicone**,
coatings, glass containers, *Penicillium cyclopium* shake culture, effects on
adherence 835.
- Silver**,
biocumulation, autoradiography, conidia, *Botrytis cinerea* 8484.
compounds, antimicrobial activity 1367.
extraction, ores oxidation, *Thiobacillus ferrooxidans* 3001.
pollution, bacteria biodegradation, resistance 3680.
resistance, gram-negative bacilli 9042.
resistance, *Pseudomonas stutzeri*, mines isolates 4698.
staining, DNA, RNA, viruses, methodology 654.
- Silver nitrate**,
staining, tumors, crown gall, plants 4534.
- Silver scurf**,
Helminthosporium solani, conidia production, media (culture), *Solanum tuberosum*
8491.
- Silviculture**,
actinorrhizas inoculation, stimulation growth, *Alnus* 8160.
actinorrhizas nitrogen fixation, plantations, *Populus nigra* x *Populus
trichocarpa*, *Alnus glutinosa* 8156.
ectomycorrhizas, sensitivity, thiram, ferbam 7299.
hydroponics, nutrient requirements, actinorrhizas, nitrogen fixation, *Alnus
incana* 8152.
nutrient uptake, nitrogen fixation, actinorrhizas, *Frankia*, *Alnus rubra*, *Cytisus
scoparius*, *Pseudotsuga menziesii* 8159.
Phytophthora, root rot, disease control, metalaxyl, seedlings, *Pseudotsuga
menziesii* 8927.
Picea sitchensis seedlings, inoculation, *Telephora terrestris* 345.
yield, inoculation, mycorrhizas 1233.
- Silvum marianum**,
tobacco streak virus isolation, characterization, host range 4565.
- Simazine**,
denitrification inhibitors, denitrifying bacteria, soil 9002.
inhibition nitrification, biodegradation, soil microorganisms 3969.
- Simulidae**,
biological control, *Bacillus thuringiensis* subsp. *israelensis* 137.
biological control, efficacy, *Bacillus thuringiensis* subsp. *israelensis*, USA,
South Carolina 4391.
biological control, streams, *Bacillus thuringiensis* subsp. *israelensis*, USA, New
Hampshire 7789.
- Simulium damnosum**,
biological control, *Bacillus sphaericus* virulence 5261.
- Simulium goeldii**,
larvae, biological control, *Bacillus thuringiensis* 136.
- Simulium ochraceum**,
biological control, larvae mortality, streams, *Bacillus thuringiensis*, Mexico
6915.
- Simulium ornatum**,
protein composition, phosphatase activity, biological control, *Coelomycidium
simulii*, *Pleistophora simulii* 2646.
- Simulium vittatum**,
pest control, efficacy, *Bacillus thuringiensis*, USA, Tennessee 6086.
- Slings alba**,
stunt Spiroplasma transmission, *Euscelidius variegatus* vectors 8030.
- Sindbis virus**,
detection, immunoelectron microscopy methodology, tissue culture 8443.
interferon, antiviral activity, cell culture, mice 2226.
plaque assay 632.
- Single-cell protein**,
amino acid composition, whey fermentation, yeasts 1722.
bacteria, production, bagasse fermentation 1734.
Candida, feeding trials, nutritive value, chickens 5361.
Candida, nutritive value, pigs 1917.
Chaetomium cellulolyticum, *Sporotrichum pulverulentum*, biodegradation,
lignocelluloses, pretreatment, sodium hydroxide, hydrogen fluoride, steam 1712.
continuous culture, contamination, bacteria, wild type, yeasts 1707.
fermentation, milk, ultrafiltration, nutritive value, pigs 1916.
fermentation, production, *Sporotrichum pulverulentum*, *Trichoderma viride*,
industrial wastes, oilseed crops, *Olea europaea* 5114.
fermentation, starch, *Schwanniomyces castellii* 1721.
fermentation, yeasts, reviews 2752.
fungi, production, use, rapeseed oil, palm oil 872.
Fusarium oxysporum f.sp. *lini*, production, amino acid composition, food industry,
industrial wastes 1729.
lactose fermentation, milk ultrafiltration, *Trichosporon cutaneum* 1719.
methionine, over production, ethylmethanesulfonate mutagenesis, yeasts 5115.
fermentation, value, feeds 1914.
Penicillium commune, mycelia binding, bile acids 7675.
production, *Aspergillus fumigatus*, fermenters, cassava roots 1709.
production, association, *Candida valida*, continuous culture, ethanol,
temperature, effects on, growth 214.
production, bagasse hydrolysis, media (culture), mathematical models,
cellulolytic bacteria 4353.
production, bagasse, sodium hydroxide pretreatment, biodegradation, *Chaetomium
cellulolyticum* 1715.
production, carbon sources, fermentation, sulfite liquor, *Pichia labacensis*
sp. nov. 6816.
production, cassava fermentation, *Rhizopus oligosporus* 1714.
production, cellulose fermentation, crop residues, cellulolytic microorganisms
3726.
production, *Chaetomium cellulolyticum*, fermentation, reactors, straw, *Triticum
aestivum* 1711.
production, economic importance, cost-benefit analysis 3727.
production, fermentation, optimization, monitoring, computer applications,
Saccharomyces cerevisiae, fermentation 5967.
production, fermentation, sulfite liquor, *Candida utilis* 7671.
production, fermentation, sulfite liquor, methanol, monitoring, computer
applications, *Candida utilis*, *Hansenula polymorpha* 5966.
production, fermentation, whey 1718.
production, fermentation, whey, lignocelluloses, nutritive value, conferences
2544.
production, food processing wastes, fishery products, *Candida utilis* 6812.
production, genetic engineering, reviews, microorganisms 3419.
production, *Geotrichum candidum*, *Candida pseudotropicalis*, lysis, *Cytophaga*,
Arthrobacter, *Streptomyces griseus* 6815.
production, glucose metabolism, mathematical models, *Chaetomium cellulolyticum*
5958.
production, gram-negative bacteria, *Agave fourcroydes* crop residues 3415.
production, growth conditions, kinetics, optimization, *Candida utilis* 9225.
production, growth factors, peat hydrolysates, *Candida utilis* 6808.
production, growth, *Hansenula polymorpha* 856.
production, hydrocarbons, carbon sources, fermentation, reviews 6288.
production, industrial wastes, distilleries, *Saccharomyces cerevisiae*, *Torulopsis
ethanolotolerans* 865.
production, methanol carbon sources, microorganisms 1922.
production, microorganisms, characterization, books, conferences 8500.
production, nitrogen composition, yeasts 3728.
production, optimization, cost-benefit analysis, fermentation, bioreactors,
Hansenula polymorpha, *Methylomonas* 5963.

Single-cell protein, (continued)

production, peat hydrolysates, conferences, fungi 7645.
 production, peat, hydrolysates, media (culture), *Agaricus campestris*, *Morchella esculenta* 6807.
 production, peat hydrolysates, sodium chloride, humic acids effects on, *Candida tropicalis* 6809.
 production, *Pekilo* process, biomass measurements, sulfite liquor, *Paecilomyces varioti* 5965.
 production, petroleum fermentation, yeasts 5960.
 production, *Phanerochaete chrysosporium*, *Candida utilis*, mixed culture, fermentation, straw, *Triticum aestivum* 1710.
 production, *Pichia sparlinae*, substrates, *Musa paradisica* crop residues 863.
 production, potassium nutrient requirements, ethanol utilization, *Torulopsis ethanoliculans* 3409.
 production, reviews 5107.
 production, *Stachylium adaphilum*, nutrient sources, *Sphagnum*, hydrolysates 7879.
 production, starch acidolysis, food industry, fermentation, *Aspergillus*, *Rhizopus*, *Penicillium* 1713.
 production, sugar beets fermentation, *Trichoderma album* 1716.
 production, sulfite liquor fermentation, *Pekilo* process, monitoring, computer applications, *Paecilomyces varioti* 5968.
 production, temperature effects on, *Candida tropicalis* 4411.
 production, *Torulopsis candida*, culture use palm oil 2553.
 production, use hydrocarbons, methane, metabolism, methylotrophic bacteria 5706.
 production, use lignocelluloses, hydrolysis, cellulase 1885.
 production, whey fermentation, *Kluyveromyces fragilis* 1723.
 production, whey fermentation, yeasts 1717.
 production, whey fermentation, yeasts 3420.
 purification, *Methylophilus methylotrophus* 8524.
 reviews, books 5093.
Saccharomyces cerevisiae, feeding trials, effects on phytic acid, nutrient availability, phosphorus, rats 7883.
Saccharomyces cerevisiae, feeds, toxicity, pathogenesis, buffaloes 1071.
Saccharomyces cerevisiae, nutritive value, silage, preservatives, cattle, sheep 2747.
 thermophilic fungi, protein composition, amino acid composition, lipid composition, vitamins 860.
Torulopsis utilis, lysine bioavailability 1730.
Torulopsis utilis, nutrient availability, juveniles, cattle 1921.
Trichoderma harzianum production, *Oryza sativa* straw utilization 3725.
Trichosporon canaanense, toxicity testing, mutagenicity testing, rats 1915.
 whey fermentation, yeasts 1720.
 yeasts, production, fermentation, methodology 7880.

Sinningia speciosa, leafspot, *Pseudomonas* 6273.

Slomycin, biosynthesis, *Streptomyces corchorusii* 3128.

Slorococcus cleavelandii-juglandacearum, canker, *Juglans cinerea*, pathogenicity, disease spread, plantations 7991.
 conidia, survival, airborne microorganisms, *Juglans cinerea* canker 1138.

Slrohaem, containing proteins, assays, peroxidase staining, immunodiffusion, *Escherichia coli* 8559.

Slsamine, analogs, synthesis, antibacterial activity 5787.

Slsomycin, antibacterial activity, *Mycobacterium fortuitum*, *Mycobacterium chelonae* 4850.
 antibiotic synergism, N-formimidoyl thienamycin, antibacterial activity, *Streptococcus faecalis*, *Streptococcus faecium* 4811.
 + azlocillin, antibiotic synergism, *Pseudomonas aeruginosa* antibacterial activity, kinetics 4836.
 +, mezlocillin, + azlocillin, antibiotic synergism, antibacterial activity, *Escherichia coli*, *Klebsiella pneumoniae*, *Pseudomonas aeruginosa* 2271.

Slsotrema brinkmannii, cell culture filtrates, tributyltin biodegradation 3648.

Slsite-directed mutagenesis, genetic engineering, dairy starters, lactic acid bacteria 3696.
 methodology, use exodeoxyribonuclease III, *Escherichia coli* 738.
 tyrosyl-tRNA synthetase genes, structure-activity relationships, tyrosyl-tRNA synthetase, X-ray crystallography, *Bacillus stearothermophilus* 8573.
 use phase M13 cloning vectors 626.

Slsitophila avenae, biological control, pathogenicity, field trials, Entomophthoraceae 5230.
 biological control, pathogens, field trials, *Erynia neoaphidis* 5229.

Slsze distribution, stomata, *Triticum* × *Secale cereale* leaves, *Puccinia recondita* rust incidence 7955.

Slskm milk, lactose hydrolysis, β -D-galactosidase, immobilized enzymes, *Aspergillus oryzae* 206.

Slskm-milk, lactic acid production, growth, measuring techniques, *Streptococcus cremoris* 7867.
 powder, *Bacillus cereus* contamination 7000.
 powder, milkfat, cheese production, *Lactobacillus* 4460.

Slskin, infection, *Pseudomonas aeruginosa*, contamination, baths, man 566.
 microflora, antiseptics disinfection, animal models 4141.
 microflora, bacteria, counting methods 4138.
 microflora, neonates, relationship, baths, washing, man 6729.
 microflora, sampling, methodology, reviews 4964.

Slskin tests, antigens, immunoassays, varicella-zoster virus 8447.
 detection, *Staphylococcus*, enterotoxin B, methodology, guinea-pigs 233.
 tuberculin, purification, characterization 1708.
 use, antigens, nucleocapsids, pseudorabies virus, pigs 617.

Slslaughter, pigs, lung, *Haemophilus pseudofluores*, dilution methodology 2463.

Slsides, agglutination, comparison, fluorescent antibody test, *Legionella* clinical isolates identification 3301.
 agglutination, lectins, identification *Staphylococcus* 700.
 assays, enterotoxin A, enterotoxin B, enterotoxin C, *Staphylococcus aureus* 4489.
 throat swabs, *Streptococcus* identification, clinical microbiology 717.

Slimes,

heterotrophic microorganisms, heavy metals concentration, rivers, Eire 6176.
Klebsiella oxytoca, *Pseudomonas aeruginosa*, spoilage, milk 6176.

Sludge, digestion (anaerobic), methanogenesis 5844.
 organic compounds, waste treatment 9238.

Sludges, oil and gas industry, land disposal, biodegradation, soil microorganisms 4919.
 wastewater treatment, isolation, *Salmonella*, indicator species, characterization, USA, Florida 4927.

Slurries, biomass production, microorganisms, media (enrichment) 7508.
 digestion (anaerobic), methanogenesis 8395.
 effects on, soil microorganisms, soil properties, flooded areas 2180.
 feeds, sheep, contamination, *Staphylococcus*, coliforms, *Salmonella* 7018.
 manure, chickens, methanogenesis 7306.
 pigs, digestion (anaerobic), inactivation, enterovirus (bovine), vaccinia virus, factors affecting 6684.
 pork, risin, effects on, *Clostridium botulinum*, growth 1924.
 wastewater treatment, nitrate-reducing bacteria, survival, *Escherichia coli*, *Salmonella enteritidis* 6700.

Smears, methodology, *Campylobacter fetus* subsp. jejuni enteritis diagnosis 3297.

Smokes, cinderisides, *Hordeum vulgare*, *Medicago sativa*, antifungal activity, fungi 8319.
 preservation, seafood, *Scorbinidae* 8718.

Smuts, biological control, *Bromus tectorum* 8024.
Sorosporium apparai sp. nov., *Kyllinga triceps*, India 2035.
Sphacelotheca reiliana, factors affecting incidence, Zea mays 8795.
 Ustilago hordei, pathogenicity, genetic analysis, disease resistance, plant breeding, models, *Hordeum vulgare* 2857.
 Ustilago maydis, free radicals levels, ear, anthers, flowers, Zea mays 5433.

Snow blight, *Pinus sylvestris*, association nutrient dynamics 5601.

Soaps, contamination, bacteria 8430.
 contamination, microorganisms, cross-infection association, man 9267.

Sodium, effects on nitrogen fixation, *Plectononema boryanum*, comparison, *Anabaena torulosa* 6381.
 levels, fungi 5341.
 + melam, use, irrigation, disease control, *Verticillium dahliae* infection, *Solanum tuberosum*, effects on yield 1209.
 + RNA, media (isolation), *Shigella* 9326.
 transport, fusococcin effects on, roots, *Beta vulgaris* 8741.

Sodium acetate, methanogenesis, mesophilic bacteria 3003.

Sodium acid pyrophosphate, + sodium nitrite, inhibition *Clostridium botulinum* growth, toxins production, frankfurters 7021.

Sodium alginate, extracellular polymers, *Pseudomonas aeruginosa*, antibodies, detection, enzyme-linked immunosorbent assay 761.

Sodium alkyl-aryl sulfonate, effects on antiseptics antibacterial activity 9261.

Sodium ascorbate, preservatives, prevention, spoilage, cured products, ham 7886.

Sodium azide, bacteriostats, immunoperoxidase test, effects on 3052.
 effects on, *Catenaria anguillulae*, biological control, *Meloidogyne incognita* 8253.
 fermentation optimization, ethanol production, effects on electron transport cytochrome c oxidase, *Saccharomyces cerevisiae* 3624.

Sodium benzoate, disease control, *Botrydiodiplodia theobromae*, fruit rot, *Citrus reticulata* 5525.

Sodium bicarbonate, detoxification methodology, aflatoxins, food contamination, *Gossypium hirsutum* seeds mules 7081.

Sodium bisulfite, reduction, nitrogenase, *Klebsiella pneumoniae* 903.
 stimulation survival *Campylobacter jejuni*, isolation, milk 4459.

Sodium borate, comparison, chloramine-T, media (transport), *Mycobacterium bovis* 665.

Sodium chloride, antibacterial activity, food, reviews 7024.
 antibacterial activity, *Yersinia pseudotuberculosis*, *Yersinia enterocolitica* 9101.
 containing Mueller-Hinton agar, use, dilution tests, micromethods, antibiotic resistance, *Staphylococcus* 3012.
 effects on *Aspergillus* aflatoxins biosynthesis, in vitro 7071.
 effects on *Corynebacterium diptheriae* toxins, conformation association acids 5388.
 effects on production, biomass, single-cell protein, peat hydrolysates, *Candida tropicalis* 6809.
 effects on *Staphylococcus aureus*, growth, toxins production 8760.
 + electrical stimulation, effects on bacteria microflora, beef 6976.
 inhibition, methanogenesis, digestion (anaerobic) 6693.
 tolerance, *Rhizobium meliloti* nitrogen fixation, glycine betaine effects on 2159.

Sodium citrate, antibacterial activity, heat resistance, spore germination, *Bacillus stearothermophilus*, canned food 7376.
 antibacterial activity, spore germination, heat resistance, *Bacillus* 7374.
 antibacterial activity, spores, calcium, magnesium, release, *Bacillus* 7375.

Sodium dicetate, antimicrobial activity, microorganisms, effects on, hay, preservation 6490.

Sodium dodecyl sulfate, effects on endopeptidase I activity, *Bacillus sphaericus* 5129.
 inhibition energy metabolism, active transport, plasma membranes, *Enterobacter cloacae* 7549.
 + polyacrylamide gels electrophoresis, comparison typing, *Neisseria meningitidis* clinical isolates identification 2456.
 resistance, *Enterobacteriaceae* 7339.
 use, yeasts RNA, DNA, isolation methodology 8492.

Sodium dodecylbenzene sulfonate, antifungal activity, disease control, post-harvest decay, tomatoes 8054.

- Sodium fluoride**, antibacterial activity 5861.
topical application, prophylaxis, dental plaque, *Lactobacillus*, *Streptococcus* mutants, cancer patients 6730.
- Sodium hydroxide**, bactericidal activity, *Mycobacterium* 3044.
detoxification methodology, aflatoxins, food contamination, *Gossypium hirsutum* seeds meals 7081.
effects on, *Trichoderma viride*, cellulase, hydrolysis, cellulose 188.
+ ferric tartrate, pretreatment, lignocelluloses, hydrolysis, cellulase, *Trichoderma reesei* 8536.
hydrolysis, hemicelluloses, bagasse, Lolium, production, xylase isomerase, endo-1,3- β -D-xylanase, *Streptomyces flavogriseus* 5186.
hydrolysis, straw, lignocelluloses, methanogenesis, acid production, methanogenic bacteria 9032.
pretreatment, bagasse, biodegradation, single-cell protein production, *Chaetomium cellulolyticum* 1715.
pretreatment, lignocelluloses, biodegradation, *Chaetomium cellulolyticum*, *Sporotrichum pulverulentum*, single-cell protein production 1712.
- Sodium hypochlorite**, disinfection, swimming pools, books 836.
- Sodium lauryl sulfate**, effects on antiseptics antibacterial activity 9261.
- Sodium nitrate**, effects on cytochrome d oxidation, U.V. spectroscopy, *Escherichia coli* 2565.
- Sodium nitrite**, + electrical stimulation, effects on bacteria microflora, beef 6976.
inhibition *Clostridium botulinum* growth, packaging, films, oxygen permeability, luncheon meat 7023.
potassium sorbate, + sodium acid pyrophosphate, inhibition *Clostridium botulinum* growth, toxins production, frankfurters 7021.
preservatives, prevention, spoilage, cured products, prevention 7886.
- Sodium phosphate**, nutrient requirements, industrial effluents distilleries, *Bacillus* 5818.
- Sodium polyanethanol sulfonate**, blood culture, *Salmonella typhi*, *Salmonella paratyphi*, effects on recovery 1579.
- Sodium taurocholate**, media (isolation), *Clostridium difficile* spores, feces 688.
- Sodium tetraborate**, bactericidal activity, *Desulfovibrio vulgaris* 3057.
- Sodium thiosulfate**, *Fusarium solani*, resistance, heavy metals toxicity 2201.
- Soft rot**, aquatic microorganisms, wood, biodegradation, reservoirs, sub-polar environments biodegradation, *Phialophora hoffmannii*, wood, clematography 1245.
Cylindrium persicum, *Erwinia carotovora* subsp. *carotovora* isolation, pathogenicity 3643.
decay fungi, vanillic acid, syringic acid, metabolism, association, lignin, biodegradation 2705.
Erwinia carotovora, disease resistance, plant breeding, germplasm, *Solanum tuberosum* 7210.
Erwinia carotovora, plants, characterization 3775.
Erwinia carotovora, *Solanum tuberosum*, tubers, comparison, stems, Chile 2015.
Erwinia carotovora subsp. *atroseptica*, soil moisture, soil temperature, tubers, *Solanum tuberosum* 2818.
Erwinia carotovora, post-harvest decay, antagonism, *Pseudomonas putida*, biological control, *Solanum tuberosum* 8112.
Erwinia, transmission (seed), *Solanum tuberosum* 8870.
Ganoderma tsugae, *Tsuga canadensis*, lignin, degradation 3917.
Pseudomonas, isolation methodology 1089.
Solanum tuberosum, *Erwinia carotovora* subsp. *atroseptica*, *Erwinia carotovora* subsp. *carotovora*, disease resistance 4581.
Solanum tuberosum, pathogenesis, *Erwinia carotovora* subsp. *carotovora* 4562.
- Softwoods**, forest products, protection, biodegradation, fungi, Canada 1248.
- Soil**, *Abies balsamea*, nitrification, methanol extracts inhibition, proteins binding effects on, sub-alpine environments 2909.
Abies balsamea, nitrification, phenols inhibition, sub-alpine environments 2908.
acetylene reduction, nitrogen fixation, ethylene release, Finland 4651.
acetylene reduction, nitrogen-fixing bacteria, forests, *Eucalyptus obliqua*, Pinus radiata 8937.
activity, effects on *Vigna unguiculata* nodulation, *Rhizobium* 8993.
actinomycetes, ecological distribution, environmental factors, population levels, Australia 8991.
activity, urease, phosphatase, arylsulphatase, Cook Is., Tongan Is. 8225.
applications, herbicides, effects on, *Drechslera sorokiniana* leafspot, *Poa pratensis* 3803.
applications, herbicides, effects on fungicides disease control, *Vigna unguiculata*, damping-off 2090.
amalgam compounds digestion (anaerobic), reviews 7830.
Aspergillus niger, heterotrophy, acid rain anions effects on 2939.
association, *Fagus sylvatica*, denitrification, bacteria 2991.
ATP levels, relationship, soil properties, measuring techniques 2147.
ATP levels, soil microorganisms, measuring techniques 1263.
ATP, measuring techniques 2932.
azimphos-methyl biodegradation, bacteria soil isolates 4444.
Azospirillum brasilense isolation, characterization 2954.
Azospirillum isolation, Poland 4665.
Azotobacter vinelandii, excretion, amino acids, vitamins 1266.
Bacillus, nutrient requirements, carbon sources, endospores formation 4619.
Bacillus thuringiensis, persistence, immunofluorescence 3580.
bacteria, algae, levels, activity, phenamiphos, oxamyl, effects on 9025.
bacteria biomass, levels, muramic acid, α , ϵ -diaminopimelic acid 5614.
bacteria, fertilization effects on, forests 2106.
bacteria, fluorescence, cytotoxicity, effects on, *Fusarium oxysporum* f.sp. *cucumerinum*, chlamydospores, spore germination 8227.
bacteria, manganese, oxidation, reduction, valency 6366.
Beauveria bassiana inoculum survival, biological control, pest control, pupae, *Lepidoptera decemlineata* 5213.
benzyl alkyrene biodegradation, bacteria 4637.
carbaryl, biodegradation, soil microorganisms, factors affecting 6387.
carriers, *Rhizobium* inoculum, cold storage, yield, *Vigna unguiculata* 2962.
cationic relationship *Phymatolithamnium omnivorum* ecological distribution 374.
clay urine effects on denitrification 2948.
- Soil, (continued)**
cellulolytic bacteria, cellulose decomposition 6339.
chitinase, assays, relationship population levels, fungi 2937.
clays minerals, interaction, microorganisms, reviews 4624.
coastal environments, sulfur oxidation, acidity, soil microorganisms 8968.
Cochliobolus sativus, sporulation, crop residues, overwintering 5420.
Cochliobolus victoriae conidia virulence, plant diseases 1090.
colonization, *Beauveria bassiana*, *Melanconium anisopliae*, disease reservoirs, biological control, *Curculio caryae* 5263.
community development, succession, microorganisms, biodegradation, organic matter, reviews 4625.
Corynebacterium, ferric oxide reduction 8260.
crop fields, vesicular-arbuscular mycorrhizas inoculation, field trials 7253.
cultivation, *Streptaria rugoso-annulata* 6395.
decontamination, composting, biodegradation, 2,4,6-trinitrotoluene, hexahydro-1,3,5-trinitro-1,3,5-triazine 7511.
dehydrogenase activity, oxygen, pH, temperature, nitrogen inorganic compounds effects on 8988.
denitrification, plantations, Hevea 6356.
denitrifying bacteria, denitrification inhibitors, simazine, atrazine 9002.
denitrifying bacteria, denitrification, nitrogen cycle, reviews 4655.
detection, gram-positive bacteria, urea, teichoic acid, bioassays 8202.
distribution, *Verticillium dahliae* propagules, USA, Ohio 7918.
disturbance, soil amendment, fungi, saprophytes, roots colonization, species composition, mines 8230.
ecological distribution, *Nematophagus fungi* isolation, methodology 5923.
effects on *Pseudomonas solanacearum* will pathogenesis, *Arachis hypogaea* 249.
environmental effects, *Mycormycetes*, soil, USA, Rocky Mountains 387.
enzymatic activity, stability 399.
Exserohilum turcium saprophytes, survival 2137.
factors affecting, microorganisms, mineralization, nitrogen, reviews 4653.
forests, bacteria enumeration, environmental factors effects on 1231.
forests, formation, ectomycorrhizas, vesicular-arbuscular mycorrhizas, rhizosphere temperature effects on 5549.
forests, labruci 25 treatment, actinomycetes enumeration 4674.
forests, organic matter, association, mineralization, carbon, nitrogen 8145.
forests, organic matter, nitrogen mineralization 7290.
 β -D-glucuronidase, sucrose hydrolysis, kinetics, pH, temperature effects on 8532.
fumigation, effects on vesicular-arbuscular mycorrhizas 7298.
fumigation, metham, antifungal activity, growth, spore germination, *Trichoderma hamatum*, *Trichoderma harzianum*, *Trichoderma viride* 8924.
fungi mycelia growth, development 401.
fungi parasites, *Nematophagus fungi*, *Nematoda*, Antarctica 8982.
fungi, seasonal variations, vertical distribution, soil moisture, ecosystem analysis, tundra 2129.
fungistasis, bacteria, inhibition spore germination, conidia, *Bipolaris victoriae* 8966.
fungistasis, phytopathogenic fungi, soil-borne diseases 328.
Fusarium oxysporum f.sp. *ciceri* colonization plant debris, saprophyte, temperature effects on 5618.
Fusarium oxysporum f.sp. *lini*, in situ, microscopy, fluorescence 1267.
Fusarium oxysporum f.sp. *niveum* infestation, nonhost crops growth association, effects on levels 3826.
Gaeumannomyces graminis var. *tritici*, growth, take-all epidemiology, *Triticum aestivum* 7145.
glutaminase activity measurements, colorimetry methodology 8212.
glycine max biodegradation, nitrogen-15 levels association 2959.
heterotrophic bacteria, sulfur cycles 8984.
histidine ammonia-lyase activity distribution 8211.
hydrocarbons, biodegradation, sewage sludge, applications, microorganisms, role on 4696.
hydroxamic acid siderophores incidence, *Escherichia coli* bioassays 675.
hyphae staining, fluorescein diacetate, *Penicillium citrinum*, *Rhizoctonia solani* 8963.
immunofluorescence, microscopy, identification, detection, *Phaeoelis schweinitzii*, propagules 4621.
inoculation, *Azotobacter chroococcum*, nitrogen fixation 4652.
inoculum, biological control, *Trichoderma viride*, *Trichoderma harzianum* 8918.
inoculum detection, *Rhizobium meliloti*, enzyme-linked immunosorbent assay 4174.
inoculum, peat, carbohydrates effects on *Rhizobium* 4642.
inoculum survival, role aromatic compounds, carbon sources, *Rhizobium leguminosarum* var. *trifolii* 3961.
isolates, nitrogen-fixing bacteria, Egypt, Arab Rep. 4647.
isolation methodology, nitrifying bacteria 6774.
isolation, *Trichoderma*, *Fusarium*, media (selective) 797.
isoproturon, persistence, biodegradation, microorganisms 4630.
keratinophilic fungi, growth, sporulation, volatiles organic compounds production effects on 5648.
land reclamation, soil microorganisms, population levels, USA, New Mexico 6392.
levels, sclerotia, *Aspergillus phaseolus*, latent infection, *Euphorbia lathyris*, weeds, USA, Arizona 8044.
manure, effects on, nitrogen fixation, *Triticum aestivum*, *Oryza sativa* 6384.
microorganisms, ecosystem analysis, isolation, media (culture), biodegradation, measuring techniques, reviews, books 5092.
microorganisms, PCB sorption 388.
microsporium genus mating types, ecological distribution, Spain 8980.
microwave radiation, effects on soil microorganisms 3361.
mines, land reclamation, *Pisolithus tinctorius*, ectomycorrhizas, colonization, seedlings, Pinus 8931.
mycoflora, relationship *Aphelenchus avenae*, population levels, forests, Pinus radiata, crop fields, *Triticum aestivum* 8223.
mycorrhizas population levels, primary production, forests 5553.
Myxomycetes, environmental effects, altitude, USA, Rocky Mountains 387.
nitrification, chromium(III), chromium(VI), effects on, nitrifying bacteria 9027.
nitrification, herbicides inhibition 9026.
nitrification, nitrifying bacteria, reviews 4654.
nitrifying bacteria, ammonium levels, nitrification inhibitors effects on 7273.
nitrifying bacteria, nitrous oxide production, phosphate, calcium carbonate, fertilizer application, effects on 7283.
nitrogen diffusion, nitrogen fixation measurements, microorganisms symbiosis, plants 411.
nitrogen, effects on, fungi, biodegradation, wood 1244.
nitrogen fixation, *Oryza sativa*, nitrogen-fixing bacteria 7287.
nitrogen levels, soil microorganisms, cellulose biodegradation, taiga 5544.
nitrogen-fixing bacteria, Trinidad, Tobago 6359.

Soil, (continued)

nitrogenase activity measurement, straw decomposition 7292.
 nitrous oxide levels, soil microorganisms, factors affecting 1274.
 organic matter, carbon-14 enrichment, flux, turnover, biodegradation, soil microorganisms 8964.
 Oryza saliva, wetlands, nitrogen cycle 3965.
 pasteurization, disease control, Trifolium subterraneum, damping-off, root rot, Pythium, Fusarium avenaceum 6301.
 peroxidase, isolation, activity 2143.
 pesticides, effects on, soil microorganisms, measuring techniques, reviews 4673.
 Pezizales, ecological distribution, habitat, Greenland 2128.
 pH, temperature, water content, effects on, Nitrosomonas europaea, nitrous oxide, production 7274.
 phosphatase activity, measuring techniques 3929.
 phosphate availability, Vicia faba residue biodegradation 3668.
 phosphate solubilization, fungi, phosphate-dissolving bacteria 2138.
 phospholipase C activity, bacteria 2847.
 phosphorus cycle, bacteria, reviews 4826.
 Phytophthora colocasiae, survival, saprophytes, association, Colocasia 8958.
 Phytophthora lateralis, isolation methodology 5650.
 poliovirus adsorption, sewage effluents, ions effects on 4934.
 pollutants fermentation, denitrification, anaerobic conditions 5670.
 population dynamics, Pseudomonas solanacearum, plant diseases 6218.
 Pseudomonas fluorescens, polytolerant biosynthesis, use, biological control, damping-off, Pythium ultimum 2888.
 Pseudomonas putida thiolester hydrolase, 2-(2,4-dichlorophenoxy)ethyl sulfate activation 880.
 Pseudomonas striata, Aspergillus awamori, solubilization, phosphate 6350.
 Pythium isolation, media (selective) 1993.
 Pythium ultimum survival, environmental effects 3928.
 rangelands, nitrogen fixation, indigenous species, introduced species, forbs, shrubs, Leguminosae 7271.
 respiration, soil microorganisms biomass, nitrogen soil amendment 2931.
 Rhizobium leguminosarum growth, inoculum size association, mathematical models 3012.
 Rhizobium meliloti, chemotaxis, motility 378.
 Rhizoctonia bataticola inoculum, mycelia, sclerotia, Cicer arietinum infection incidence 1976.
 rhizosphere, composition, Triticum aestivum, Oryza sativa, manure effects on 2398.
 savannahs, urea fertilizers, sulfur coatings, pH, nitrogen levels 8256.
 seedbanks requirements, bioassays, Salmonella typhimurium 375.
 soil microorganisms, carbon monoxide, inhibition, nitrogenase, association, ethylene, production 6357.
 soil microorganisms, nitrification, adaptations, cold, climatic conditions, Greece 6358.
 soil temperature, water potential effects on, growth, Gaeumannomyces graminis var. tritici 8986.
 solar radiation-fumigation effects on crater disease, Triticum aestivum 8120.
 solar radiation, treatment, effects on, soil microorganisms 4618.
 solarization, effects on Macrophomina phaseolina sclerotia viability 6302.
 spore, viruses, waste water, applications 3931.
 Spongiospora subterranea detection methodology 1675.
 spore germination, conidia, life cycle, Penicillium daleae, Penicillium bilaii 8959.
 spores, Glomus, Sclerocystis, Israel 6337.
 staining, oospores, mycelia, phytophthora megasperma f. sp. glycinea 8203.
 sterilization, methodology 1288.
 sterilization, use, fungicides fumigation, Turkey 337.
 storage, anaerobic conditions, effects on soil microorganisms, use, soil 5688.
 storage, vesicular-arbuscular mycorrhizas restoration, land reclamation, gravel pits 1253.
 straw residues, biodegradation 7249.
 survival, Gaeumannomyces graminis var. tritici 6351.
 survival, Glomus caledonium, Acaulospora laevis 5644.
 survival, Sclerotium rolfsii, saprophytes 3943.
 temperature, effects on, soil microorganisms, denitrification 4672.
 thawing, soil microorganisms, nitrous oxide production, denitrification 7285.
 Trichoderma, antagonism, Pythium, biological control 8115.
 tropical environment, media (culture), Rhizobium, interaction, Metarhizium 5634.
 urea adsorption, Trinidad 7288.
 urease activity, urea hydrolysis 7250.
 vertical distribution, β -D-fructofuranosidase activity, measuring techniques 6333.
 Verticillium dahliae procrea incidence, Pinus strobus, Pinus sylvestris, USA, Virginia 3619.
 vesicular-arbuscular mycorrhizas propagules, isolation methodology, measuring techniques, reviews 824.
 volume, inhibition vesicular-arbuscular mycorrhizas growth stimulation, Allium cepa 5643.
 water potential, respiration, nitrogen fixation, Azotobacter vinelandii 8237.

Soil aeration,
 carbon dioxide, effects on Glomus macrocarpum symbiosis, Eupatorium odoratum, Guizotia abyssinica, Sorghum bicolor 3937.
 effects on vesicular-arbuscular mycorrhizas, nutrient uptake, Eupatorium odoratum, Sorghum bicolor, Guizotia abyssinica 1256.

Soil amendment,
 bacteria inoculum, effects on yield, Solanum tuberosum, Zea mays 8201.
 cadmium, copper, toxicity, bacteria 4675.
 calcium oxide, soil microorganisms, biomass, C/N ratios 2998.
 commercial, microorganisms, effects on Triticum aestivum growth, yield 8960.
 crop residues, effects on population levels, soil microorganisms 5687.
 disease control, soil-borne diseases, Fusarium oxysporum f. sp. vasinfectum, Fusarium oxysporum f. sp. lycopersici 8104.
 feedlot, industrial wastes, soil microorganisms 8258.
 fungicides, disease control, Solanum tuberosum, plant diseases, Globodera rostochiensis, Verticillium dahliae 8121.
 land reclamation, revegetation, coal, mines, industrial wastes, microorganisms, role 3955.
 manure, fecal coliforms, coliforms, drainage, water quality, crop fields 6709.
 Mesogium littorale, crop residues, decomposition, soil microorganisms 5685.
 nitrogen, soil microorganisms biomass, soil respiration 2931.
 organic compounds, stimulation 2,4-D biodegradation, bacteria 6391.
 organic matter, effects on phytopathogenic fungi damping-off, Pinus banksiana, Picea mariana 1239.
 polysaccharides, stimulation 2,4-D biodegradation, bacteria 6389.

Soil amendment, (continued)

sawdust, oil cake, disease control, root rot, Triticum aestivum 8088.
 sewage sludge composts, disease control, fungi, crops 5488.
 sewage sludge, composts, disease control, soil-borne diseases 311.
 sewage sludge, disease control, crown gall, Rubus 310.
 solid wastes, composts, fertilizer applications, Switzerland 8392.
 straw, effects on Bradyrhizobium japonicum, population levels, rhizosphere, Glycine max 7282.
Soil analysis,
 clays, soil microorganisms, carbon sources soil analysis, biomass levels, factors affecting 2935.
Soil characteristics,
 effects on ectomycorrhizas inoculation, trees response association, reviews 350.
 effects on plants response association vesicular-arbuscular mycorrhizas, reviews 390.
 soil microorganisms, respiration, grasslands 395.
Soil chemistry,
 effects on Rhizobium leguminosarum var. trifolii inoculation, nodulation, Trifolium repens 7278.
Soil density,
 nitrification, denitrification 5659.
Soil depth,
 effects on sclerotia germination, Sclerotium rolfsii 6338.
Soil fertility,
 crops, allelopathy, role soil microorganisms, phytotoxins 4636.
 soil microorganisms, conferences 5946.
Soil fungitaxis,
 Helminthosporium victoriae conidia spore germination 2928.
 nematodes, plant diseases, reviews 8764.
Soil horizons,
 forest floor, seasonal variations, ascospores, fungi 5540.
Soil microflora,
 biodegradation, petroleum 3987.
Soil microorganisms,
 acetic acid, production, straw decomposition, ash, stabilization, soil properties 7300.
 actinomycetes, isolation, membrane filtration 6316.
 activity, ammonium sulfate, fertilizer applications, organic matter accumulation, soil structure, pasture 5640.
 activity, nitrogen cycle, pasture, New Zealand 7268.
 agricultural practices effects on 376.
 allelopathy, Asparagus officinalis 3831.
 aluminum phosphate utilization, phosphorus sources 2151.
 antagonism, Rhizoctonia, Ceratobasidium, eye spot, Gramineae 7208.
 antimicrobial activity, mandibular glands, secretions, Calomymex 3069.
 antimicrobial activity, nematodes 1325.
 association, Solanum tuberosum, cross-reactivity, Corynebacterium sepedonicum, antisera, immunofluorescence, microscopy 7186.
 ATP levels, soil, measuring techniques 1263.
 ATP, soil, measuring techniques 2932.
 Azotobacter, Pseudium leaves effects on, in situ 4643.
 bacteria, actinomycetes, feeding, Aphelenchus avenae 7263.
 bacteria, distribution, USSR 3954.
 bacteria, mercury resistance, gene transfer, R factors 5717.
 bacteria, respiration, gas chromatography 400.
 biodegradation, carbofuran, soil, factors affecting 6387.
 biodegradation, cellulose, preservatives 7302.
 biodegradation, flux, turnover, organic matter, carbon-14 enrichment, soil 8964.
 biodegradation, glucose, soil pollution effects on, calorimetry 2933.
 biodegradation, indane isomers 9023.
 biodegradation, live roots, Pinus resinosa, Acer saccharum, Quercus borealis 6322.
 biodegradation, nutrient availability, ash, industrial wastes, land disposal 8257.
 biodegradation, oil and gas industry sludges, land disposal 4919.
 biodegradation, PCB 8976.
 biodegradation, phenol 2141.
 biodegradation, phthalic acid, monobutyl phthalate, dibutyl phthalate 8961.
 biodegradation, toxicity, fosamine ammonium, hexazinone, N-(phosphonomethyl)glycine 2175.
 biodegradation, trifluralin, dealkylation 1041.
 biodegradation, 2,4-D, temperature effects on 4433.
 biogeochemistry, metals uptake, conferences, books 2543.
 biological activity, fluorene, soil pollution, pollution effects 413.
 biomass assays, chemical analysis, nitrogen, phosphorus, soils (organic) 5631.
 biomass, biochemical characteristics, pasture, New Zealand 6346.
 biomass, composts, methodology 5684.
 biomass estimation, chloroform, fumigation, nitrogen cycle, carbon cycle 8224.
 biomass levels, carbon sources decomposition, humification, clays 2938.
 biomass levels, zinc, manganese, cobalt, nutrient cycles 6347.
 biomass measurements, factors affecting 7247.
 biomass mineralization, nutrient cycles, carbon, nitrogen, paddy fields 5632.
 biomass, C/N ratios, soil pH, calcium oxide soil amendment effects on 2998.
 biomass, phosphorus concentration 6348.
 biomass, soil respiration, nitrogen soil amendment 2931.
 biomass, Triticum aestivum, nitrogen cycle, crop production (no-tillage), crop fields, Triticum aestivum 5669.
 biomass, urease activity, phosphatase activity 1264.
 biotechnology, crops, yield, books 3366.
 carbon cycle, nitrogen cycle, mathematical models 3938.
 carbon cycle, nitrogen cycle, mathematical models 5636.
 carbon cycle, soil nutrients, forests 6321.
 carbon dioxide production, ash pollution effects 3951.
 carbon dioxide production, fertilization effects on 2179.
 carbon dioxide production, volcanic ash effects on 7269.
 carbon sources biodegradation, heat production association 2150.
 carbon sources decomposition, biomass levels, factors affecting, soil analysis, clays 2935.
 carbon sources degradation, kinetics, models 2127.
 CGA-15281 biodegradation, structure-activity relationships, orchards, Prunus persica 5686.
 colonization, leaf litter, decomposition, interspecific relationships, invertebrates, forest floor 7222.
 colonization, stimulation seedlings growth, Hordeum vulgare 3936.
 community composition, pollution effects, copper, nickel 2142.
 composition, phytotoxins toxicity, Maus pumila rhizosphere 2146.

Soil microorganisms, (continued)

crop residues decomposition, hydraulics effects on percolation 7509.
 crop rotation, tillage 2140.
 crop rotation, Zea mays, *Triticum aestivum*, herbicides effects on 2929.
 cyanuric acid, biodegradation 1894.
 2,4-D biodegradation, soil moisture, soil temperature 6390.
 decomposition, crop residues, phytotoxicity reduction, *Hordeum distichon* 2936.
 decomposition, leaching effects on, straw, *Hordeum vulgare* 2942.
 decomposition, nutrient cycles, straw, *Hordeum vulgare* 5683.
 decomposition, soil amendment, crop residues, *Medicago littoralis* 5685.
 decomposition, wood, urea fertilization effects on, forests 5578.
 dehydrogenase, respiration, herbicides effects on 8254.
 denitrification, soil, temperature, effects on 4672.
 ecological analysis, soil properties, soil temperature 4623.
 electron transport chain, respiration, 2,4-D effects on 412.
 effects on, forests 7221.
 fumigation effects on, crop fields 5681.
 fungi, permethrin derivatives toxicity 2174.
Fusarium, grasslands 3950.
 geographical distribution, deserts forests, USA, Arizona 7246.
 β -glucosidase activity, cellobiose biodegradation 3672.
 growth, heterotrophy, acid rain effects on 2940.
 heterotrophy, acid rain anions effects on 2939.
 in situ freeze-thawing effects on, *Pseudomonas paucimobilis*, *Acanthamoeba polyphaga* 4638.
 inhibition, 2,4-dioxohexahydro-1,3,5-triazine 3970.
 keratophilic fungi, Spain 6336.
 land reclamation, mining, waste disposal sites 4676.
 leaves decomposition, *Eperua falcata* 2917.
 litter decomposition, rain forests, tropical environment 7224.
 litter decomposition, rain forests, tropical environment 7226.
 metalaxyl interaction, survival, *Phytophthora cinnamomi* 2091.
 mycorrhizal effects on, biodegradation 3024.
 microwave radiation soil effects on 3361.
 Myxobacterales, lysis, *Rhizoctonia solani* hyphae, *Cochliobolus miyabeanus* conidia, biological control, plant diseases 8920.
 nitrification, biodegradation, herbicides 3969.
 nitrification, soil, adaptations, cold, climatic conditions, Greece 6358.
 nitrogen cycle, agricultural land, Denmark, reviews 2984.
 nitrogen cycle, fertilizers, agricultural ecosystems 5665.
 nitrogen cycle, mathematical models, forests 8146.
 nitrogen cycle, seasonal variations, grasslands 5667.
 nitrogen fixation, crop fields, measuring techniques 1277.
 nitrogen fixation, crops 5910.
 nitrogenase activity measuring techniques, plants 1276.
 nitrous oxide levels soil, factors affecting 1274.
 nitrous oxide production, denitrification, soil thawing 7285.
 nutrient cycles, agricultural ecosystems, reviews 5630.
 nutrient cycles, leaf litter decomposition, plantations, *Coffea arabica* 5624.
 nutrient cycles, litter, forest floor, burning effects on, *Pinus ponderosa* forests 8932.
 nutrient cycles, mineralization, fallow land, crop production (no-tillage), crop fields, *Triticum aestivum* 5668.
 nutrient cycles, nutrient dynamics, organic matter, crop fields 5637.
 nutrient dynamics, environment management, pasture 8963.
 organic matter biodegradation, crop fields 1263.
 organic matter decomposition, humification, mathematical models 5638.
 paddy fields, reviews 377.
 pesticides, effects on, soil, measuring techniques, reviews 4673.
 petroleum biodegradation, reviews 8265.
 phosphamides effects on, fungi 6388.
 phosphorus cycle, crop fields 4633.
 phytopathogenic fungi, methyl bromide, toxicity 1218.
 phytotoxins, role allelopathy, soil fertility, crops 4636.
 plants, powdery mildew disease control fungicides effects on 2078.
 pollution effects, acid rain, nitrification, denitrification 8245.
 population dynamics, land reclamation, moorland 5633.
 population levels, calcium oxide, organic matter, soil amendment effects on, mining wastes 3971.
 population levels, herbicides effects on 7296.
 population levels, soil amendment, composts, solid wastes, manure 3972.
 population levels, soil amendment, crop residues effects on 5687.
 population levels, soil, land reclamation, USA, New Mexico 6392.
 population levels, trifolium effects on, crop fields, *Triticum aestivum* 5682.
 propagules size, relationship, population levels, longevity 397.
 respiration, association, water potential, soils (loam) 2149.
 respiration, nitrification, ammonification, iprodione effects on 1286.
 respiration, soil characteristics, grasslands 395.
 rhizoplane interface, electron microscopy, ultrastructure, books 1693.
 rhizosphere microorganisms, population levels, *Lycopersicon esculentum*, *Phaseolus vulgaris* 8990.
 rhizosphere soil composition, *Triticum aestivum*, *Oryza sativa*, manure effects on 2996.
 role, Bulgaria soil types, biological properties 2925.
 role, cellulose mineralization 4631.
 role, humus dynamics, biochemical characteristics 2148.
 role, survival, *Fusarium*, forest floor 5539.
 savannahs, tropical environment, ecosystem dynamics 2941.
 selenium volatilization 7261.
 sensitivity, zinc, lead 1261.
 soil amendment, industrial wastes, fermentation 8258.
 soil, carbon monoxide, inhibition, nitrogenase, association, ethylene, production 6357.
 soil fertility, conferences 5946.
 soil pollution, cadmium, self-purification, biodegradation 4633.
 soil properties, slimes effects on, flooded areas 2180.
 soil types, amylolytic enzymes activity 1270.
 solar radiation, treatment, effects on, soil 4618.
 storage, anaerobic conditions effects on, soil, use land reclamation 5688.
 straw biodegradation, interaction, carbon, nitrogen, agricultural ecosystems 2699.
 sulfur dioxide, pollution effects, forest floor 5613.
 sulfur, mineralization, forests 1230.
 sulfur, nutrient cycles, forests 4611.
 sulfur organic compounds formation, forests soils 5617.
 sulfur oxidation, sand, soil, dunes, coastal environments 8968.

Soil microorganisms, (continued)

thiosulphate sulphurtransferase, humus, forests, *Picea* 2916.
 toxicity, nontarget organisms, pesticides, heavy metals, pollution effects 5680.
 toxicity testing, dissolved oxygen uptake, resazurin test 398.
Triticum repens, inoculation, *Rhizobium leguminosarum* var. *trifolii* 5678.
 urease inhibitors, ammonia volatilization, fertilizer applications 1285.
 urease, soil temperature, soil moisture effects on, semiarid environments, tropical environment 8239.
 urease, urea hydrolysis, ammonium production, fertilizer applications 6383.
 waste treatment, biodegradation, industrial wastes oil and gas industry, land disposal 2178.
 xenobiotics binding humus 1258.
Soil moisture,
 2,4-D biodegradation, soil microorganisms 6390.
 drying, effects on denitrification, forests 8938.
 effects on, *Fusarium solani* f.sp. *phaseoli*, infection, *Phaseolus vulgaris* 3782.
 effects on, nitrogen fixation, nodulation, *Medicago sativa* 2165.
 effects on nitrogen fixation, nodulation, *Rhizobium*, nitrogen-fixing bacteria, crops 2980.
 effects on urease, soil microorganisms, semiarid environments, tropical environment 8239.
 Erwinia carotovora subsp. *atroseptica*, soft rot, tubers, *Solanum tuberosum* 2818.
 fungi, ecosystem analysis, tundra 2129.
Lycopersicon esculentum, buckeye rot, effects on pathogenesis, *Phytophthora parasitica* 5456.
 nitrogenase activity, nitrogen-fixing bacteria, rhizosphere, pasture 9018.
Pseudomonas putida, survival, biological control, *Fusarium oxysporum*, wilt, *Linum usitatissimum* 2897.
 Vigna radiata, effects on nitrogen fixation, *Rhizobium* 4640.
Soil nutrients,
 carbon cycle, soil microorganisms, forests 6321.
 nitrogen cycle, Hawaii 7223.
 relationship, *Coniferales* susceptibility, *Amillaria mellea* root rot 2919.
 relationship *Fusarium solani*, blight, Citrus 2003.
 uptake, *Meloidogyne incognita*, interspecific relationships, *Fusarium oxysporum* f.sp. *vasinfectum*, wilt, *Gossypium barbadense* 2833.
Soil pH,
 aluminum toxicity, *Rhizobium leguminosarum* var. *trifolii* nodulation, trifolium repens 7279.
 calcium oxide, soil amendment, effects on roots colonization, vesicular-arbuscular mycorrhizas, Zea mays 5629.
 effects on nitrite, role, nitrification, denitrification 5673.
 effects on, *Rhizobium leguminosarum*, nodulation, nitrogen fixation, Lens esculenta 407.
 effects on *Rhizobium leguminosarum* var. *trifolii* inoculation, nodulation, Trifolium repens 7278.
 effects on soil microorganisms, biomass, C/N ratios 2998.
 humus, mineralization, carbon, nitrogen 5656.
 Pezizales, ecological distribution, habitat, *Genitalia* 2128.
 relationship, *Coniferales* susceptibility, *Amillaria mellea* root rot 2919.
Soil pollution,
 cadmium, self-purification, biodegradation, soil microorganisms 4633.
 decontamination, fluoride solubilization, *Penicillium*, *Fusarium culmorum*, *Fusarium merisoides* 7258.
 effects on soil microorganisms biodegradation glucose, calorimetry 2933.
 fluorine, soil microorganisms, biological activity 413.
 land disposal, microorganisms biodegradation 4120.
 microorganisms, biodegradation, reviews 1018.
 pesticide pollution, carbafur, fenitrothion, biodegradation, bacteria 2173.
 2,4,5-T, *Pseudomonas cepacia* biodegradation 3679.
Soil properties,
 ash, stabilization, straw decomposition, acetic acid, acid production, soil microorganisms 7300.
 effects on *Arthrobotrys irregularis*, pest control, *Meloidogyne* 5218.
 grasslands, clays α -amylase, β -D-fructofuranosidase, activity 403.
 soil ATP levels relationship, measuring techniques 2147.
 soil microorganisms, ecological analysis, deserts 4623.
 soil microorganisms, slimes effects on, flooded areas 2180.
 suppressive soils, phytopathogenic fungi, soil-borne diseases, reviews 329.
 waste water, irrigation, crop fields, bacteria, characterization 4924.
Soil salinity,
 desiccation, viability, *Rhizobium meliloti*, inoculum 4663.
 effects on nitrogen fixation, *Rhizobium japonicum*, *Glycine max* 2163.
Soil structure,
 clays dispersion, rhizosphere microorganisms, organic acids effects on 5639.
 soil microorganisms activity, ammonium sulfate, fertilizer applications, organic matter accumulation, pasture 5640.
Soil temperature,
 cellulose biodegradation, soil microorganisms, taiga 5544.
 2,4-D biodegradation, soil microorganisms 6390.
 effects on colonization, vesicular-arbuscular mycorrhizas, *Glomus epigaeum*, *Glomus mosseae*, USA, Kansas, *Triticum aestivum* 7259.
 effects on *Glomus macrocarpus*, inoculation, growth, *Eupatorium odoratum* 7256.
 effects on growth, *Gaeumannomyces graminis* var. *tritici* 8986.
 effects on *Suaeda* luteus fruit bodies formation, plantations, *Pinus radiata* 5571.
 effects on urease, soil microorganisms, semiarid environments, tropical environment 8239.
 Erwinia carotovora subsp. *atroseptica*, soft rot, tubers, *Solanum tuberosum* 2818.
Morchella esculenta, spore germination, saprophyte 386.
 soil microorganisms, ecological analysis, deserts 4623.
 tolerance, *Rhizobium* soil isolates, nodulation, tropical environment, Vigna unguiculata 8241.
 +water potential, disease control, *Gossypium hirsutum*, root rot, *Phytophthora omnivora* 8009.
Soil types,
 Argentina, association, vesicular-arbuscular mycorrhizas determination, plants 3939.
 Bulgaria, biological properties, soil microorganisms role 2925.
 Colombia, *Rhizobium* inoculation, *Leguminosae* nodulation, nitrogen yield 2158.
 Eucalyptus sieberi, root rot, *Phytophthora cinnamomi* 5584.
 soil microorganisms, amylolytic enzymes activity 1270.
Soil-borne diseases,
 disease control, soil amendment, fungistasis, *Fusarium oxysporum* f.sp. *vasinfectum*, *Fusarium oxysporum* f.sp. *lycopersici* 8104.
 disease reservoirs, *Corynebacterium michiganense* subsp. *michiganense*, canker, crop

Soil-borne diseases, (continued)

residues, *Lycopersicon esculentum* 8872.
disease reservoirs, *Pythium aphidanderatum*, baiting substrates, seeds, *Cucumis sativus* 8763
fungi, interaction, endomycorrhizas, reviews 392.
Macrophomina phaseolina, *Sclerotium rolfsii*, disease control, solar radiation 2845.
phytopathogenic fungi, biological control, suppressive soils induction, reviews 331.
phytopathogenic fungi, disease control, soil amendment, sewage sludge composts 311.
phytopathogenic fungi, disease control, suppressive soils 332.
phytopathogenic fungi, models, reviews 5402.
phytopathogenic fungi, suppressive soils 328.
phytopathogenic fungi, suppressive soils, soil properties, reviews 329.
plant diseases, biological control, suppressive soils 330.
 γ -irradiation, biological control, ectomycorrhizas antagonism, *Fagus* 5513.
Pythium, *Rhizoctonia solani*, disease control, agricultural practices comparison fungicides, *Phaseolus vulgaris* 1210.
Rhizoctonia, disease control, composts, ornamental plants 6300.
Verticillium dahliae, pathogenicity, *Gossypium hirsutum*, association crop rotation 1149.

Soils, forests, sulfur organic compounds formation, soil microorganisms 5617.

Soils (acid), *Rhizobium leguminosarum* var. *trifolii* nodulation, aluminum toxicity, *trifolium repens* 7279.

soil pH, soil chemistry, effects on *Rhizobium leguminosarum* var. *trifolii* 3111.

soil respiration, nodulation, *Trifolium repens* 7278.

urea biodegradation, nitrification, heterotrophic bacteria 4671.

Vigna unguiculata *Rhizobium*, γ radiation effects on 2951.

Soils (calcareous), surveys, patch, plant diseases, *Rhizoctonia solani* 255.

Soils (loam), glyphosate applications, effects on *Trifolium subterraneum* *Rhizobium trifolii* 3111.

nodulation, nitrogen fixation 2995.

water potential, soil microorganisms respiration association 2149.

Soils (podzolic), nitrogen fixation, denitrification, fertilizers effects on 8232.

Soils (saline), vesicular-arbuscular mycorrhizas inoculation, growth stimulation, *Glomus fasciculatum* 5616.

Soils (sandy), *Pythium*, *Fusarium*, root rot, *Zea mays* 1998.

rhizosphere microorganisms organic matter composting, effects on *Sorghum vulgare* roots 2121.

vesicular-arbuscular mycorrhizas spores levels, phosphate nutrient uptake, yield, *Anacardium occidentale* 7260.

Solamargine, antifungal activity, leaves, *Solanum aviculare* 8307.

Solanaceae, fungi infection, oxalic acid levels 6281.

host range, tomato yellow top virus 7180.

Solanapyrone, structure, *Alternaria solani* 8738.

Solanum, plant breeding, disease resistance, plant viruses 2837.

potato spindle tuber viroid infection, pathogenesis 8849.

Solanum aviculare, leaves, alkaloids, antifungal activity 8307.

Solanum gourlayi, potato virus M disease resistance, inheritance 6294.

Solanum khasianum, *Fusarium* wilt 1161.

Solanum laciniatum, glycoalkaloids, hydrolysis, *Aspergillus* 6155.

glycoalkaloids hydrolysis, *Aspergillus* β -D-glucosidase 1006.

Solanum nigrum, tumorigenesis, Ti plasmid, *Agrobacterium tumefaciens* 2819.

Solanum nigrum var. judaicum, plant diseases, potato virus Y, pathogenesis 6263.

potato virus Y, histopathology, characterization 8864.

Solanum nigrum var. nigrum, potato virus Y, histopathology, characterization 8864.

Solanum sparsipilum, disease resistance, *Pseudomonas solanacearum*, wilt, cross-resistance, *Meloidogyne* 8097.

Solanum sucresense, gemplasm, disease resistance, wilt, *Pseudomonas solanacearum* 8090.

Solanum tuberosum, agglutinins, interaction, lipopolysaccharides, extracellular polysaccharides, *Pseudomonas solanacearum* 6285.

Alternaria alternata pathogenicity, Israel 6284.

association, soil microorganisms, cross-reactivity, *Corynebacterium septicum*, antisera, immunofluorescence, microscopy 7186.

blackleg, disease resistance, *Erwinia carotovora* subsp. *atroseptica* 2025.

blackleg disease resistance screening projects, *Erwinia carotovora* subsp. *atroseptica* 5483.

blackleg, effects on, growth, yield 2026.

blackleg, *Erwinia carotovora* subsp. *atroseptica* 2027.

blackleg, *Erwinia carotovora* subsp. *atroseptica*, *Erwinia carotovora* subsp. *carotovora*, synergism, *Verticillium dahliae* wilt, *Fusarium roseum* 7191.

blight, *Pseudomonas solanacearum* inoculation methodology 8871.

cells, membrane potential, *Phytophthora infestans* infection effects on 2014.

cultivars, menstem tip culture, heat treatments, decontamination, potato virus X, potato virus S 8881.

damping-off, *Rhizoctonia solani*, pathogenicity 282.

detection, potato leaf roll virus, potato virus Y, enzyme-linked immunosorbent assay 5883.

detection, potato spindle tuber viroid, hybridization, electrophoresis 8861.

disease control, *Phytophthora infestans*, *Pseudoperonospora cubensis*, cross-resistance, fungicides, metalaxyl 2894.

disease resistance, wilt, *Fusarium* 1146.

disease transmission, *Verticillium dahliae* 7183.

dry rot, growth conditions, *Fusarium* 2030.

Erwinia carotovora soft rot, tubers, comparison, stems, Chile 2015.

Solanum tuberosum, (continued)

experimental infection injection systems 4495.
gangrene, *Phoma exigua*, disease resistance 2070.
gemplasm, disease resistance, wilt, *Pseudomonas solanacearum* 8090.
gemplasm, plant breeding, disease resistance, soft rot, *Erwinia carotovora* 7210.
gemplasm, viruses infection 8882
infected, potato virus X, potato virus S, benomyl effects on shoots tissue culture 8001.
infection, tomatillo yellow top virus, antigenic relationship, potato leaf roll virus, beet western yellows virus 8847.
late blight, *Phytophthora infestans*, disease control, fungicides, foliar applications 8915.
late blight, *Phytophthora infestans*, disease control, metalaxyl, mancozeb 8926.
late blight, *Phytophthora infestans*, disease control, use, olurace controlled-release granules 2887.
late blight, *Phytophthora infestans*, fungicides disease control 1214.
late blight, *Phytophthora infestans*, pathogenicity, oospores production, reduction, *Phytophthora drechsleri* 8034.
leaves infection, *Phytophthora infestans*, susceptibility, fertilizer applications 2812.
leaves, lesions, susceptibility, potato virus Y 8836.
meristem tip culture, plant viruses, plant breeding 3858.
metabolites, antifungal activity 7382.
oxalic acid levels, fungi infection 6281.
pathogenicity, *Fusarium roseum*, *Gliocladium cucumerinum*, disease resistance, lignin deposition 7206.
pathogenicity, *Phytophthora infestans*, recombination, inheritance 2815.
pathology, *Verticillium dahliae*, relationship, *Erwinia carotovora* subsp. *carotovora*, infection 4533.
Phytophthora infestans infection, disease resistance correlation papillae 6303.
Phytophthora infestans late blight, pathogenesis, ultrastructure 3837.
Phytophthora infestans pathogenicity, role fatty acid composition, mycelia 2012.
phytochemistry, *alternan*ol A, *Alternaria solani* 2813.
plant breeding, disease resistance, developing countries 2874.
plant diseases, bacteria, fungi, viruses, books 3380.
plant diseases, fungicides, soil amendment, disease control, *Verticillium dahliae*, *Globobera rostrichensis* 8121.
plant diseases, *Fusarium*, effects on yield 7173.
plant diseases, *Fusarium*, incidence, Finland 7171.
plant diseases, *Rhizoctonia solani*, biological control, *Verticillium biguttatum* 5514.
plant diseases, *Verticillium dahliae*, roots growth 5460.
post-harvest decay, soft rot, *Erwinia*, biological control, *Pseudomonas putida* 8112.
potato common scab, *Streptomyces* 6283.
potato leaf roll virus infection, insecticides, disease control, *Myzus persicae* 2065.
potato leaf roll virus, pathogenicity, disease transmission, vectors, *Myzus persicae* 4553.
potato leaf roll virus, potato virus Y, disease transmission, role, *Myzus persicae*, *Aphis gossypii* 8023.
potato virus detection, use, enzyme-linked immunosorbent assay 8832.
potato virus S transmission, cutting instruments, greenhouses, crop fields 8008.
Rhizoctonia solani, biological control, mycelia soil amendment, hyperparasitism, *Verticillium biguttatum*, *Gliocladium roseum* 2089.
Rhizoctonia solani infection, biological control, *Azotobacter chroococcum* antagonism 2088.
Rhizoctonia solani pathogenicity, British Isles 2021.
ring rot, bacteria, disease resistance 4559.
ring rot, *Corynebacterium septicum*, identification, agglutination, immunodiffusion, diagnosis 8466.
ring rot, *Corynebacterium septicum*, light intensity effects on 7998.
ring rot, *Corynebacterium septicum*, media (culture), culture aging effects on pathogenicity 7999.
rot, *Phytophthora parasitica*, *Phytophthora cryptogea*, pathogenesis, USA, Texas 1155.
seed treatments, pathogens antagonism, siderophores, *Pseudomonas* 2831.
seedlings, plant viruses, maintenance, symptoms, distribution 8865.
silver scurf, *Helminthosporium solani*, conidia production, media (culture) 8491.
soft rot, *Erwinia carotovora* subsp. *atroseptica*, *Erwinia carotovora* subsp. *carotovora*, disease resistance 4581.
soft rot *Erwinia*, transmission (seed) 8870.
soft rot, pathogenesis, *Erwinia carotovora* subsp. *carotovora* 4562.
Solanum tuberosum, meristem tip culture, plant viruses 3859.
spraing disease resistance, Denmark 8910.
stems, *Erwinia carotovora* subsp. *carotovora*, virulence, pathogenesis 2817.
structure, sclerotia, microtubules, *Verticillium dahliae* 7936.
tissues, *Corynebacterium septicum* infection diagnosis 8869.
tubers, blackleg, *Erwinia carotovora*, disease control, heat treatments 1195.
tubers, callose growth, disease resistance, haustoria, *Phytophthora infestans* 2008.
tubers, crown gall tumors, indole-3-acetic acid treatment 8874.
tubers, disease resistance, dry rot, *Fusarium roseum* 8826.
tubers, glycoalkaloids levels, disease resistance, *Rhizoctonia solani* 8840.
tubers, infection, *Erwinia carotovora*, *Verticillium albo-atrum*, *Verticillium dahliae*, potato virus X, beet western yellows virus, potato leaf roll virus 8031.
tubers, potato virus Y, potato virus A, enzyme-linked immunosorbent assay detection 4538.
tubers, soft rot, *Erwinia carotovora* subsp. *atroseptica*, soil moisture, soil temperature 2818.
tubers, suberin, depolymerization, esterase, infection, *Fusarium solani* f.sp. *psii* 8852.
varieties, plant breeding, disease resistance, potato virus X 8884.
Verticillium dahliae infection, disease control, use, irrigation + metam + sodium, effects on yield 1209.
yield, association, infection, potato virus X, potato virus Y, potato leaf roll virus, metribuzin foliar applications effects on 8019.
yield, bacteria inoculum soil amendment effects on 8201.

Solar radiation, disease control, *Lycopersicon esculentum*, stem canker, *Didymella lycopersici* 2847.
disease control, *Plasmodiophora brassicae* clubroot, *Brassica oleracea*, *Brassica rapa* 292.
disease control, soil-borne diseases, *Macrophomina phaseolina*, *Sclerotium rolfsii* 2845.
Escherichia coli, pathogens reduction, irrigation water 9249

Solar radiation, (continued)

- food drying, use, methanogenesis, digestion (anaerobic), food processing, industrial wastes 7489.
- heat treatments, water purification, contamination, pasteurization, water, methodology 3225.
- soil+fumigation, effects on crater disease, *Triticum aestivum* 8120.
- treatment, effects on, soil, soil microorganisms 4618.
- Solesodenone**,
antifungal activity, leaves, *Solanum aviculare* 8307.
- Solesodine**,
antifungal activity, leaves, *Solanum aviculare* 8307.
- Solenopsis invicta**,
biological control, pathogens, toxicity, *Serratia marcescens*, *Pseudomonas aeruginosa* 5267.
- Solenopsis richteri**,
biological control, pathogens, toxicity, *Serratia marcescens*, *Pseudomonas aeruginosa* 5257.
- Solid phase methods**,
cyclopin A synthesis 4732.
- immunofluorescence, *Legionella pneumophila* antibodies detection 1656.
- Solid tumors**,
antitumor activity, structure-activity relationships, *Microlobosporia grisea* D-manno-D-glucan, carbohydrate composition, mice 4376.
- Solid wastes**,
agricultural wastes, bark, composting 4099.
- bacteria, fungi, viruses, disease transmission, Rodentia, Diptera, public health 2361.
- composting 4081.
- composting 4098.
- composting, developing countries 5835.
- composting, ponds, nutrient sources, phytoplankton 6689.
- composts, fertilizer applications, soil amendment, Switzerland 8392.
- composts, soil amendment, effects on population levels, soil microorganisms 3972.
- disposal, environmental hygiene, public health 2370.
- fermentation, enzymatic activity measurements 545.
- hospitals, microorganisms, contamination 4963.
- sewage sludge, composting 3199.
- Solubilization**,
methodology, *Bacillus thuringiensis* subsp. *israelensis* proteins crystals, toxicity, *Aedes aegypti* larvae 1859.
- phosphate, soil, fungi, phosphate-dissolving bacteria 2138.
- Solutions**,
contact lenses, disinfectants, antifungal activity 5870.
- Solvents**,
aqueous solutions, hydrodynamics, conversion, microorganisms 3687.
- conversion, immobilized cells, immobilized enzymes 141.
- effect on vesicular stomatitis virus infection, mammalian cells, cell culture 2434.
- pretreatment, lignocelluloses, cellulase hydrolysis 8683.
- pretreatment, lignocelluloses, hydrolysis, cellulase, *Trichoderma reesei* 8536.
- production, carbohydrates fermentation, pulp mills, wood, *Clostridium* 5259.
- production, *Clostridium butyricum*, inoculum, methodology 684.
- production, immobilized cells, reviews 3575.
- role, DNA, antibiotics binding 9175.
- steroids production, immobilized cells, *Nocardia rhodochrous* 3525.
- Sonchus oleraceus**,
latent infection, *Euphorbia lathyris*, weeds, USA, Arizona 8044.
- Sonication**,
Escherichia coli, enterotoxins levels 1957.
- Sooty bark**,
Cryptosporidium colony, population structure, life cycle, epidemiology, strains compatibility, *Acer pseudoplatanus* 8190.
- Sophora japonica**,
leaves, phytoalexins production, Helminthosporium carbonum inoculation 1131.
- Sorbia**,
effects on *Aspergillus flavus* aflatoxin B1 biosynthesis, in vitro 7095.
- effects on *Aspergillus parasiticus*, spores injuries, growth, aflatoxins biosynthesis 7042.
- effects on *Byssoschlamys nivea*, biomass, patulin biosynthesis 6207.
- effects on fungi spores, germination, growth, thermal injury 1072.
- stimulation, *Fusarium acuminatum* T-2 toxin biosynthesis, *Aspergillus flavus* aflatoxin B1 biosynthesis 2761.
- Sorbitol**,
conversion, sorbose production, *Gluconobacter oxydans* 4358.
- inhibition ethanol fermentation, *Saccharomyces cerevisiae* 2678.
- preservatives, *Bacillus thuringiensis* formulations, biological control, *Choristoneura fumiferana* 2667.
- Sorbitol oleate**,
solubilization, n-alkanes, metabolism, *Candida lipolytica* 1307.
- D-Sorbitol-6-phosphate dehydrogenase**,
purification, characterization, *Escherichia coli* 8555.
- Sorbose**,
production, sorbitol conversion, *Gluconobacter oxydans* 4358.
- Sorbus**,
host plants, fireblight, reviews 7166.
- Sorghum**,
disease resistance plant breeding, fungi, viruses, bacteria 8897.
- grain infection, fungi 7150.
- juices, Fermentation, ethanol production, Yeasts 5302.
- leaves, disease resistance, observation methods 5426.
- nitrogen fixation, inoculation, *Azospirillum brasilense* 5661.
- pc locus, gene expression, host-pathogen interactions, phytoalexins effects on, *Periconia circinata* 4519.
- seedlings, *Nicotiana glauca* measurements, free-living bacteria 8967.
- Sorghum bicolor**,
Azospirillum inoculation, effects on yield 5657.
- Azospirillum* inoculation, effects on yield 6367.
- disease resistance, charcoal rot, *Macrophomina phaseolina* 8890.
- downy mildew, *Peronosclerospora sorghi*, disease control, foliar applications, metazaly, eflosite-AI 8126.
- downy mildew, *Peronosclerospora sorghi*, disease control, seed treatments, metazaly, eflosite-AI 8144.
- host-pathogen interactions, *Phymatrichum omnivorum* 5437.
- juices, fermentation, ethanol production, immobilized cells, *Saccharomyces uvarum*

Sorghum bicolor, (continued)

- 8658.
- nutrient uptake, nitrogen sources, ammonium sulfate, vesicular-arbuscular mycorrhizas effects on 8215.
- pathology, sheath blight, *Sclerotium roffii*, *Gloeosporospora sorghi* 4518.
- pathology, stalk rot, *Fusarium bicolor* 7966.
- Peronosclerospora sorghi* downy mildew, disease control, crop rotation, tillage 1175.
- soil aeration, carbon dioxide effects on symbiosis, *Glomus macrocarpum* 3937.
- vesicular-arbuscular mycorrhizas, nutrient uptake, soil aeration effects on 1256.
- Sorghum vulgare**,
roots, soils (sandy), clays, rhizosphere microorganisms organic matter composting effects on 212.
- vesicular-arbuscular mycorrhizas, phosphorus effects on 8200.
- Sori**,
Hemileia vastatrix development, *Coffea arabica* infection 7185.
- Sorosporium apparatus sp. nov.**,
smut, *Kyllinga triceps*, India 2035.
- South Africa**,
Arachis hypogaea, blight, *Sclerotinia minor* 5410.
- Chrysanthemum norifolium*, chrysanthemum stunt viroid detection 6261.
- Prunus*, canker, *Pseudomonas syringae* pv. *syringae* 274.
- Zea mays*, root rot, stalk rot, role, *Phialophora zeicola* sp. nov. 284.
- South America**,
Cajanus cajan diseases, crop production, economic importance 7139.
- ethanol, production, fermentation, reviews 6108.
- Southern bean mosaic virus**,
infection, incidence, *Vigna unguiculata*, USA, South Carolina 8777.
- strains isolation, pathogenicity, *Vigna unguiculata*, temperature role 2777.
- Soy sauce**,
kaji molds, spores inoculum production 196.
- production, protoplast fusion, *Aspergillus oryzae* 4451.
- production, role, α -amylase, proteinase, *Aspergillus oryzae* 3697.
- Soybean milk**,
curd, *Penicillium caseicolum* fermentation, bromelain coagulants 7852.
- flavor compounds, genetic engineering, nitrosguanidine, mutagenesis, *Lactobacillus casei* subsp. *alactosus* 3701.
- Soybean mosaic virus**,
disease resistance genes, inheritance, *Glycine max* 2853.
- infection, *Glycine max*, disease transmission, *Myzus persicae* 1973.
- infection, *Glycine max*, effects on *Bradyrhizobium japonicum* nodulation, nitrogen fixation 7140.
- monoclonal antibodies production, hybridoma, use radioimmunoassay, diagnosis, plant diseases 4998.
- Soybeans**,
+corn, meals, fermentation effects on nutritive value, minerals, lactic acid bacteria 5355.
- meals, *Aspergillus flavus* aflatoxins production 3746.
- meals, +corn meals, fermentation effects on amino acid composition, lactic acid bacteria 5357.
- meals, *Rhizopus oligosporus* fermentation, characterization 7016.
- Spacelotheca reiliana**,
lipids production, carbon sources, nitrogen sources 1850.
- Spain**,
Cicer arietinum, *Ascochyta* blight 3791.
- incidence, *Haemophilus influenzae*, clinical isolates, antibiotic resistance, ampicillin, chloramphenicol, antibiotic sensitivity testing 6420.
- keratinophilic fungi, soil microorganisms 6336.
- soil, *Microsporium gypseum* mating types, ecological distribution 8980.
- Sparosmycin**,
analogs, antibacterial activity, peptidyl transferase, *Escherichia coli* 4740.
- analogs, structure-activity relationships 6584.
- Spartina alterniflora**,
lignin, mineralization, fungi, role 1026.
- lignocelluloses, biodegradation, microorganisms 2704.
- lignocelluloses, lignin, polysaccharides, biodegradation, microorganisms 5305.
- Spas**,
baths, folliculitis, *Pseudomonas aeruginosa*, case reports, man 7530.
- Spatial distribution**,
Abies alba white rot, *Collybia butyracea*, *Collybia maculata* 4616.
- glycine mottle virus new records, host range, classification, *Glycine tomentella* isolates, Australia 5404.
- Sclerotium roffii* stem rot, *Arachis hypogaea*, crop fields, USA, North Carolina 7134.
- Species composition**,
bacteria, fouling organisms, marine environment 1040.
- fungi, orchards, *Citrus* 3930.
- fungi, asprophytes, roots colonization, soil disturbance, soil amendment, mines 8230.
- fungi, soils, *Notofagus dombyi* forests, Argentina 3906.
- Spick**,
bacteria, disease control, manganese+cupric hydroxide, *Lycopersicon esculentum* 6310.
- detection, use, phages, *Lycopersicon esculentum* 8823.
- Lycopersicon esculentum*, factors affecting *Pseudomonas syringae* pv. *tomato* survival 276.
- Pseudomonas syringae* pv. *tomato*, disease resistance genes, inheritance, *Lycopersicon* 2828.
- Pseudomonas syringae* pv. *tomato*, disease resistance, plant breeding, cultivars, *Lycopersicon esculentum* 1179.
- Pseudomonas syringae* pv. *tomato*, disease resistance screening projects, genetic analysis, *Lycopersicon esculentum* 5482.
- Pseudomonas syringae* pv. *tomato*, *Lycopersicon esculentum*, acid rain 4554.
- Xanthomonas campestris* pv. *vesicatoria*, disease resistance, plant breeding, cultivars, *Lycopersicon* 2829.
- Spectinomycin**,
antibiotic resistance, *Neisseria gonorrhoeae*, characterization 2209.
- Spectrometry**,
fermenters, *Saccharomyces italicus* fermentation, gases liquids phase transition 154.
- thermoplasmaquinone, menaquinone, *Wolonia succinogenes* 6894.
- Spectrophotometry**,
 α -L-arabinofuranosidase, *Aspergillus fumigatus* 837.
- aspartate carbamoyltransferase assays 937.

Spectrophotometry, (continued)

bioassays, amphotericin B, *Streptomyces nodosus* 4857.

methodology, powdery mildew, *Erysiphe* 7917.

methodology, palladium detection, antibiotics 496.

Spectroscopy

bioassays, methanogenesis, digestion (anaerobic), methanogenic bacteria 8269.

cytochrome d, redox potential, *Escherichia coli* 4273.

methodology, bacteria proteinase activity 4213.

monobactams, identification 2283.

N.M.R., muracilins, isolation, *Nocardia orientalis* 6805.

structure, antibiotic OA-6129E, antibiotic OA-6129D, *Streptomyces* 7460.

structure, chymocin 6890.

structure, trestatin, *Streptomyces dimorphogenes* sp.nov. 1447.

Spermidine synthase

Mycobacterium flavescens, *Mycobacterium fortuitum*, *Pseudomonas aeruginosa*, ethambutol, inhibition 7353.

Spermospora

disease control, fungicides applications, *Lolium perenne*, seeds yields 8108.

Sphaeloma

anthracnose, *Vitis vinifera* yield 2029.

Sphaeloma ampelinum

foliar diseases, seasonal variations, *Vitis vinifera* 8016.

Sphaerotheca reiliana

head smut, inoculation equipment, *Zea mays* 254.

lipids production, factors affecting 5250.

smut, factors affecting incidence, *Zea mays* 8795.

Sphaerosporella brunnea

ectomycorrhizas, mycelia, inoculation, seedlings, *Pinus banksiana* 7227.

ectomycorrhizas, *Pinus banksiana* 8162.

Sphaerotheca fuliginea

3-phenyl-prop-2-yn-1-ols synthesis, antifungal activity 3059.

powdery mildew, *Cucumis sativa*, *Czechoslovakia* 3836.

Sphaerotheca pannosa

mildew, disease resistance, plant breeding, *Rosa* 8096.

powdery mildew, disease resistance, plant breeding, *Rosa multiflora* 8904.

powdery mildew, *Prunus*, disease control, fungicides, new records 339.

Sphaerotheca pannosa var. parvula

powdery mildew, disease resistance, genetic analysis, *Persica* 4570.

Sphaerotheca pannosa var. roseae

rares, isolation, virulence, *Rosa cultivars* 2807.

Sphaerotilus

continuous culture, dissolved oxygen coefficients, determination methodology 668.

Sphagnum

hydrolysates, nutrient sources, *Scytidium acidophilum*, single-cell protein, production 7879.

Spheroplasts

membrane fusion, flocculation activity, role fermentation, *Saccharomyces*

diastaticus, *Saccharomyces cerevisiae* 8637.

Spicellum roseum

comparison, *Trichoderma reesei*, cellulase, production, activity 3497.

Spices

antimicrobial activity, characterization, reviews 6492.

essential oils, antifungal activity, growth, aflatoxins production, *Aspergillus*

parasiticus 7891.

essential oils, antifungal activity, yeasts 8318.

Salvia officinalis, essential oils, antibacterial activity 8719.

Spikes

Mycoplasma, pathogenesis, phytotoxins, *Santalum album* 8955.

Triticum aestivum, association, *Corynebacterium michiganense* subsp. *tritici*,

incidence, *Anguina tritici* 8803.

SpL probes

plasma membranes, immunoassays, detection, *Neisseria meningitidis* antibodies

3325.

Spium

nutrient requirements, oxalic acid, acetic acid, ozonation, wastewater treatment

4121.

soil, Trinidad, Tobago 6359.

Spirochaetaceae

microscopy, use, avidin biotinylated horseradish peroxidase complex 3283.

Spirochaetes

endotoxins, Limulus lysate test, Lyme disease 5385.

media (selective), isolation, *Ixodes dammini*, Lyme disease association 2494.

pectinolytic enzymes, isolates 6824.

6-Spirocyclopropyl penicillanates

synthesis 6534.

Spiroperidylrifamycin

new records, antibacterial activity, tuberculosis treatment, animal models 2282.

Spiroplasma

antibacterial activity, herbicolin A 9214.

media (culture), nutrient requirements, methodology 1570.

pathogenicity, plant diseases 4498.

stunt, growth, media methodology 3266.

stunt transmission, *Euscelidius variegatus* vectors, *Sinapis alba*, *Pisum sativum*,

Raphanus sativus, *Spinacia oleracea* 8030.

stunt, vectors host range, *Dalbulus longius* 7960.

Spiroplasma citri

antigens, antisera, *Vinca rosea* infection pathogenesis 1968.

brittle root disease, cauliflower mosaic virus, turnip mosaic virus, infection

effects on, *Armoracia rusticana* 8020.

growth, media methodology 3266.

host range, *Barbarea vulgaris*, *Brassica kaber*, capsella bursa-pastoris 4557.

isolation, yellows, X-disease, disease transmission vectors, *Colladonus montanus*,

Scaphytopius nitidus 8021.

Spiroplasma

biological control, endotoxins, *Bacillus thuringiensis* subsp. *kurstaki*,

biological control, use resistant mutant, U.V. radiation, temperature, *Bacillus*

thuringiensis 6746.

Spiroplasma frugiperda

biological control, mortality, dose-response effects, mathematical models,

bioassays, nuclear polyhedrosis virus 6901.

epidemics cell culture, nuclear polyhedrosis virus replication, inoculum

production, biological control 3249.

Spodoptera littoralis

biological control, *Bacillus thuringiensis* subsp. *entomocidus* 3564.

epidemiological control, endotoxins, *Bacillus thuringiensis* subsp. *entomocidus* 3563.

biological control, endotoxins, *Bacillus thuringiensis* subsp. *kurstaki*,

biological control, nuclear polyhedrosis virus 3571.

biological control, pathogenicity, synergism, chitinolytic bacteria,

phagostimulants, proteolysis, U.V. radiation, *Bacillus thuringiensis*

var. *entomocidus* 131.

biological control, pathogens effects on hemolymph amino acids, *Bacillus*

thuringiensis 6912.

biological control, use resistant mutant, U.V. radiation, temperature, *Bacillus*

thuringiensis 6746.

host-pathogen interactions, host-parasite interactions, predator-prey

interactions, *Bacillus thuringiensis*, *Zelex chlorophthalma*, *Paeonius alferii*,

Egypt, Arab Rep. 128.

larvae, biological control, use, *Bacillus thuringiensis* endotoxins 118.

larvae, predator-prey interactions, biological control effects on, *Bacillus*

thuringiensis 6843.

Spodoptera litura

Bacillus thuringiensis subsp. *thuringiensis*, dosage, effects on 6087.

Spoilage

aerobic bacteria, anaerobic bacteria, pasteurization, packaging, cold storage,

shelf life, seafood, *Crassostrea virginica* 8720.

Agaricus bisporus, monophenol monoxygenase activity, browning, citric acid

effects on 3705.

Bacillus stearothermophilus, gas production, canned food, beans 6988.

bacteria, acidification effects on growth, textured soy protein, beef, minced

meat 6987.

bacteria, cured products, meat products, food processing 3708.

bacteria, steam pasteurization, storage, light effects on, pork 4465.

bacteria, hydrogen sulfide, *Gadus morhua* 3689.

bacteria, meat, 3711.

bacteria, meat, books 4242.

bacteria, meat, refrigeration 3712.

bacteria, milk, pasteurization, cold storage 1910.

bacteria, milk products, 6964.

bacteria, proteolytic enzymes, milk, pasteurization, refrigeration, shelf life

6175.

bacteria, sampling, methodology, meat 3715.

bacteria, shelf life predictions, refrigeration, milk 6174.

bacteria, steam pasteurization, freezing, seafood, *Crassostrea virginica* 5364.

beer, bacteria, media (isolation) 4192.

beer, bacteria, yeasts 5327.

beer, *Lactobacillus brevis*, detection, media (isolation) 4414.

cellulase, fungi, calcium chloride prevention, pickles, fermented food 8699.

colliforms, off flavor, organoleptic evaluation, shelf life, milk 4448.

dough, bakery products, microorganisms 5326.

eggs, bacteria, detection, automated methods, comparison organoleptic evaluation

1052.

Enterobacteriaceae, detection, Limulus lysate test, catalase production, luncheon

meat 6967.

Eurolium amstelodami, *Saccharomyces rouxii*, water content effects on,

mathematical models, apples 8877.

food processing, bacon, ham 3709.

fungi, corn, storage, preservation, ammonia+propionic acid 7025.

gases composition, measuring techniques, canned food 6178.

lactic acid bacteria, beer 1872.

meat, bacteria, role food poisoning 3713.

microorganisms, γ radiation prevention, silage, *zea mays* 6202.

microorganisms, beverages, bottles, reviews 7872.

microorganisms, meat, books 1889.

microorganisms, tumbling effects on, ham 7857.

milk, coliforms, cold storage, pasteurization, lactoperoxidase 1912.

milk, sialm, *Klebsiella oxytoca*, *Pseudomonas aeruginosa* 6176.

prevention, preservatives, sodium nitrite, sodium ascorbate, poultry, cured

products 7886.

Pseudomonas, *Lactobacillus cellulosus*, vacuum packaging, films, oxygen

permeability, action 5362.

psychrotrophic bacteria, temperature, shelf life, poultry, meat products 6972.

Staphylococcus aureus, *Salmonella hadar*, *Salmonella typhimurium*, freeze-thawing

storage effects on, beef, poultry 6975.

vacuum packaging, nitrogen packaging, luncheon meat 8715.

wine, brandy, yeasts, bacteria 5279.

xerophilic fungi, coconut 5344.

yeasts, water activity, pH, temperature, potassium sorbate effects on,

confectionery 6698.

Spongopora subterranea

soil, detection methodology 1675.

Sporangia

role, *Pythium ultimum* survival, soil, environmental effects 3928.

Sporangiospores

conidia, separation techniques, fungi, dextrans, polyethylene glycol, solutions,

two-phase systems 8489.

Sporaricin A

comparison, antibiotic K-4619, antibacterial activity 7479.

Spore crystals

Bacillus sphaericus, α -endotoxin, toxicity, larvae, *Culex pipiens*, *Anopheles*

stephensi 3572.

Bacillus sphaericus, biological control, larvae, *Culicidae* 6917.

Bacillus thuringiensis, surface net, morphology, toxicity, biological control,

Bombix mori 2660.

inoculum production, use biological control, nutrient requirements, *Bacillus*

thuringiensis subsp. *galienae* 7601.

toxicity, insects, *Bacillus thuringiensis* subsp. *darmstadtensis* 6082.

Spore germination

Aspergillus nidulans, antifungal activity, IBP, dicloran 1222.

Bacillus, antibacterial activity, sodium citrate 7374.

Bacillus, *Clostridium*, inactivation, acids, food, reviews 7026.

Bacsa, enumeration, heat activation, milk agar, media (isolation) 1911.

Bipolaris victoriae, conidia, soil fungistasis, role bacteria 8966.

chlamydospores, *Fusarium oxysporum* f.sp. *cucumerinum*, bacteria, fluorescence,

cytolysis, effects on, soil 8227.

Chondrostereum purpureum, inhibition, integrated control, fungicides+ *Trichoderma*

viride, silver-leaf disease, pruning wounds, *Prunus domestica* 5588.

Clostridium botulinum, pH, salinity effects on 1899.

conidia, life cycle, *Penicillium daleae*, *Penicillium bilaii*, soil 8959.

Spore germination, (continued)

- conidia, *Verticillium lecanii*, inhibition, carbaryl+iprodione, integrated control, Aphididae 2654.
Cronartium flaccidum basidiospores, fluorescence brighteners effects on 2529.
Erysiphe pisi, association, *Pisum sativum* resistance, comparison, susceptibility cultivars 245.
Erysiphe pisi conidia, relationship, direct light, comparison, *Pisum sativum* leaves light penetration 2774.
 fungi, carbendazim, treatment, effects on, *Saccharum officinale* 8127.
 growth conditions, *Thyronectria austro-americana* 7634.
 Helminthosporium victoriae conidia, pure culture, comparison, soil fungistasis 2239.
Hornbasidiomyces, ectomycorrhizas, environmental factors, roots exudates effects on 2130.
Monilia fructicola conidia, temperature effects on, in vitro, in vivo, fruits, *Prunus persica*, *Prunus persica* nectarina 7992.
Morchella esculenta, saprophyte, soil temperature 386.
 mycorrhizas, organic acids production, agar, association, autoclaves, effects on 5934.
Pseudocercospora herpotrichoides, eye spot, *Triticum aestivum*, factors affecting 7146.
Pycnularia oryzae, conidia, inhibition, caffeic acid, superoxide, free radicals, role disease resistance, plant diseases 8889.
Pythium ultimum, rhizosphere, *Gossypium hirsutum* 1148.
 sodium citrate, antibacterial activity, *Bacillus stearothermophilus*, canned food 7376.
Trichoderma hamatum, *Trichoderma harzianum*, *Trichoderma viride*, antifungal activity, metham, soil fumigation 8924.
 Trichophyton mentagrophytes, conidia, arthrospores, antifungal activity, imidazoles 5738.
 urediniospores, *Melampsorium betulinum*, temperature effects on, rust, *Betula* 8950.
 vesicular-arbuscular mycorrhizas, factors affecting, reviews 391.
 vesicular-arbuscular mycorrhizas, temperature effects on 402.

Spores

- Aspergillus fumigatus*, antifungal activity, iron(II), hydrogen peroxide, iodide 4014.
Aspergillus parasiticus, injuries, growth, aflatoxins biosynthesis, sorbic acid, propionic acid, effects on 7042.
Bacillus anthracis, identification, radioimmunoassay, methodology 677.
Bacillus, calcium, magnesium, release, sodium citrate antibacterial activity 7375.
Bacillus, clostridium, resistance, chlorine, disinfection, food industry 6413.
Bacillus licheniformis, sterilization, canning, tomatoes 7033.
Bacillus megaterium, radiosensitivity, oxygen levels effects on superoxide dismutase 4743.
Bacillus sphaericus, fate, biological control, larvicides, ponds, *Culex tarsalis*, *Anopheles franciscanus* 1845.
Bacillus stearothermophilus, heat resistance bioassays 6493.
Bacillus subtilis, bioassays, sterilization, dental manipulation, medical instruments 7545.
Bacillus subtilis, pH effects on, bactericidal activity, peracetic acid 7550.
Bacillus subtilis, recovery methodology, beef 6965.
Bacillus subtilis, removal, air filtration, fermenters 8504.
Bacillus subtilis var. *niger*, ethylene oxide resistance, sterilization cycles 4035.
Bacillus subtilis var. *niger*, sterilization solutions, propylene oxide, chlorhexidine diacetate 4784.
Bacillus thuringiensis, protection, sunlight inactivation, biological control 119.
 bacteria, heat resistance, mechanisms, food industry 6415.
 bacteria, inhibition, antimicrobial agents, food industry 7028.
 bacteria, pathogens, aerosols, laminar air flow, safety cabinets 9262.
 bacteria, resistance, hydrogen peroxide, food industry 6414.
Beauveria bassiana, survival, fungicides effects on, biological control, *Leptinotarsa decemlineata* 2647.
Clostridium botulinum, radiation effects on 4468.
Clostridium difficile, feces, media (isolation), sodium taurocholate 688.
Clostridium perfringens, spatial distribution, sediments, indicator species, sewage, sediments, lakes 2388.
Clostridium sporogenes, media (culture) 4207.
Clostridium sporogenes, yolk, agar, media (culture), enumeration, methodology 674.
Colletotrichum gloeosporioides, production, fermenters, weed control, biological control, *Aeschynomene virginica* 3895.
Colletotrichum lindemuthianum, cell adhesion, *Phaseolus vulgaris*, hypocotyls 3796.
 dispersal, *Eutypa armeniaca* dieback, air-borne diseases, *Vitis vinifera*, *Prunus armeniaca* 1152.
 dispersal, mathematical models, *Bacillus thuringiensis* 3544.
 endomycorrhizas, culture, isolation, methodology 3358.
 foliar applications, persistence, biological control, *Bacillus thuringiensis*, *Gossypium* 117.
 fungi, bacteria, antimicrobial activity, alkylthiomethyl-isochinolium chloride 9135.
 fungi, thermal injury, preservatives effects on, germination, growth 1072.
Gliosis, *Sclerotocystis*, soil, Israel 6337.
 heat resistance, bacteria, food industry 7030.
Heterobasidium annosum, samplers, catching methods, methodology 8488.
 immobilized cells, progesterone hydroxylation, *Aspergillus ochraceus* 6048.
 inoculum, production, soy sauce koji molds 196.
 microorganisms, heat sterilization 1368.
 phytopathogenic fungi, discharges, phylloplane electrical properties, *Phaseolus vulgaris*, *Zea mays* 7143.
 phytopathogenic fungi, discharges, phylloplane electrical properties measurement 7914.
 phytopathogenic fungi, discharges, phylloplane electrical properties, *Phaseolus vulgaris*, *Zea mays* 7925.
 phytopathogenic fungi, introduced species, quarantine, New Zealand 6329.
 phytopathogenic fungi, wind dispersal, modelling, crop fields, *Hordeum vulgare* 5403.
 Phytophthora cinnamomi, Phytophthora parasitica, parasitism, *Catenaria anguillula*, biological control, root rot, *Citrus*, *Persea* 5515.
Pisolithus tinctorius, inoculation, *Coniferales* roots, seedlings survival 5607.
Pisolithus tinctorius, inoculum, *Pseudotsuga menziesii*, *Abies concolor*, *Abies magnifica* var. *shastensis* 5579.
 powder, *Bacillus thuringiensis*, *Bacillus sphaericus*, biological control, *Culex quinquefasciatus* 6918.
Pseudocercospora herpotrichoides, dispersal, eye spot, Gramineae, inhibition, cellulose xanthate 8058.
Pseudocercospora herpotrichoides, dispersal, rainfall, wind, eyespot, straw, *Triticum aestivum* 1997.
Pseudocercospora herpotrichoides, *Pyrenopeziza brassicae*, dispersal, rainfall, plant diseases 1109.
 Ustilago avena, imazail, nuarimol, effects on ultrastructure 2889.
 vesicular-arbuscular mycorrhizas, levels phosphate nutrient uptake, yield, soils (sandy), *Anacardium occidentale* 7260.
 Sporidices, bacteria, reviews 1323.
 sterility testing 1369.
 sterilization, autoclaves 7396.
 Sporobolomyces ruberrimus, cell walls, lysozyme, purification, characterization 2585.
 Sporocytophaga myxococcoides, cellulose biodegradation, fermentation, biomass measurements, monitoring, computer applications 6165.
Sporolactobacillus, spores, heat resistance, food industry 7030.
 Sporothrix schenckii, identification, immunodiffusion 860.
 isolation, swimming pools floors 586.
 Sporotrichum cellulosum, Trichoderma reesei, penicillium, Thielavia terrestris, cellulase, physicochemical properties, comparison 6008.
 Sporotrichum pulverulentum, biodegradation, olives food processing wastes, proteins production 871.
 biodegradation, *Triticum aestivum* lignocelluloses 6943.
 cellulase deficient mutant, lignin biodegradation, lignocelluloses 1886.
 lignin biodegradation 1010.
 mutants, cellulase, β -D-glucosidase, overproduction, characterization 878.
 single-cell protein production, fermentation, industrial wastes, oilseed crops, *Olea europaea* 5114.
 single-cell protein production, lignocelluloses biodegradation, pretreatment, sodium hydroxide, hydrogen fluoride, steam 1712.
 wastewater treatment, rotating discs, industrial effluents 2341.
 Sporotrichum thermophile, cellulase, purification, characterization 4272.
 Sporulation, Alternaria carthami, induction methodology, media (culture) 4223.
Bacillus licheniformis, correlation, α -amylase biosynthesis 1821.
Bacillus sphaericus media (culture), growth, larvicides activity 127.
Bacillus sphaericus, relationship, toxicity, *Culex pipiens*, larvae, biological control 6089.
Bacillus sphaericus, transformation, protoplast fusion, plasmid pUB110, plasmid pBC116, biological control, *Culicidae* 2666.
Bacillus subtilis, cytoplasmic membranes, proteins, purification, characterization 2555.
Bacillus subtilis, stringent response, antibiotics effects on 2242.
 biotyping, Frankia, actinorhizans, relationship nodulation, *Alnus glutinosa* 8157.
Cochliobolus sativus, overwintering, soil, crop residues 5420.
Cronartium flaccidum, teliospores, urediniospores, environmental factors effects on, infection, *Vincetoxicum officinale* 3927.
Erysiphe pisi, association, *Pisum sativum* resistance, comparison, susceptibility cultivars 245.
Gigaspora margarita, vesicular-arbuscular mycorrhizas, roots colonization, pure culture, *Lycopersicon esculentum* 8481.
 incidence, rust disease resistance, *Phaseolus vulgaris* cultivars comparison 8082.
 keratinophilic fungi, soil, volatiles organic compounds production effects on 5648.
 media (culture), *Clostridium perfringens* 6757.
 Phytophthora cinnamomi, Rhizobium, effects on 7262.
 promotion factors, detection methodology, *Bacillus subtilis* vegetative cells 3334.
Pyrenochaeta lycopersici, induction methodology 1673.
 relationship, production, acetone, butanol, ethanol, *Clostridium acetobutylicum* 7784.
Septoria nodorum, growth stage, seasons, temperature effects on, *Triticum aestivum* 5432.
Streptomyces griseus, A-factor intracellular levels effects on 4846.
 temperature effects on, *Bacillus licheniformis* 5974.
 vesicular-arbuscular mycorrhizas, phosphate soil amendment induction, *Paspalum notatum* 2134.
Zoophthora radicans, temperature effects on, mortality, biological control, *Therioaphis trifolii* 1855.
 Spot, Beltraniella humicola, *Punica granatum* fruits, new records 2002.
 Capsicum chaenose, disease resistance, *Xanthomonas campestris* pv. *vesicatoria* 4582.
 Kalanchoe blossfeldiana, bacteria, etiology 4555.
 Leptosphaeria tritici, Trifolium repens 8781.
 pathogenesis, *Pseudomonas cichorii* infection, *Pelargonium hortorum*, *Chrysanthemum morifolium* 4537.
 Rhizoctonia oryzae-sativae, *Oryza sativa* 5436.
 Stereophyllum versicarium, pathogenesis, *Asparagus officinalis* 8945.
 veins, *Carya ilicifolia*, *Gnomonia nersisada*, pathogenesis, epidemiology, disease control, fungicides 1137.
Xanthomonas campestris, disease resistance, plant breeding, *Capsicum annuum* 8903.
Xanthomonas campestris pv. *vesicatoria*, *Capsicum annuum*, chlorosis, ethylene production 4546.
Xanthomonas campestris pv. *vesicatoria*, effects on yield, fruits, *Lycopersicon esculentum* 277.
 Spot blotch, Helminthosporium sativum, pathogenicity, host range, *Panicum virgatum* 2794.
 Spraing, disease resistance, *Solanum tuberosum*, Denmark 8910.
 Spring virescence of carp virus, antigens detection, immunoperoxidasetest, fluorescent antibody test, organs, *Cyprinus carpio* 5888.

- Sputum**,
contaminants, tuberculosis, man, contamination, *Mycobacterium tuberculosis* 2417.
cystic fibrosis, bacteria quantification, media (selective) 7588.
fungi clinical isolates, time effects on culture 807.
media (selective), *Legionella pneumophila*, diagnosis, Legionnaire's disease 3336.
- Squalene monooxygenase (2,3-epoxidizing)**,
inhibition, antifungal activity, naffidine derivatives 8320.
- Squash leaf curl virus**,
vector-borne diseases, *Bemisia tabaci*, characterization, disease transmission, Cucurbita 1150.
- Squash mosaic virus**,
Bemisia tabaci, disease transmission, epidemiology, Cucumis melo, Cucurbita pepo, USA, California 3821.
- Stachyotrys chartarum**,
verrucarin J biosynthesis, media (culture) 7072.
- Staining**,
acridine orange, detection, bacteria, blood culture 672.
bacteria, ethidium bromide fluorescence, blood samples 5044.
bacteria, flagella, methodology 1576.
dental plaque, man 4968.
detection, hemocellulose degradation, cellulolytic bacteria 1634.
electron microscopy, Congo virus surfaces structure, models 5004.
extracellular polymers, polysaccharides, bacteria 5060.
fluorescein diacetate, hyphae, soil, *Penicillium citrinum*, *Rhizoctonia solani* 5933.
fluorescence, monoclonal antibodies, methodology, cytomegalovirus, identification, tissue culture 8441.
fluorescence, nuclei, fungi 5936.
fungi hyphae, wood, methodology 7631.
immunoelectrofocusing, identification, subacute sclerosing panencephalitis virus, immunoglobulin G, methodology 638.
immunoperoxidase test, + fibroblasts cell culture, herpes simplex virus detection 5002.
malachite green, detection, bacteria, sewage treatment 2331.
membrane filtration, bacteria enumeration 9329.
methylene blue, acridine orange, Gram stain, bacteria, blood culture 703.
mycelia, soil, phytophthora megasperma f.sp. glycinea 8203.
Mycobacterium bovis viability, methodology 8468.
Mycobacterium leprae, methodology 7582.
Mycobacterium leprae, reviews 3340.
Mycoplasma, colonies, measuring techniques 5893.
mycoplasma-like organisms, pleomorphism, infection, *Catharanthus roseus* 2816.
peroxidase, assays, nitrate reductase, sirloin containing proteins, *Escherichia coli* 8552.
phosphatase assays, bacteria 8610.
rhodamine, fluorescence, membrane potential, live bacteria 5025.
silver, DNA, RNA, viruses, methodology 654.
silver nitrate, tumors, crown gall, plants 4534.
tetrazolium blue, use, viruses plaque assay, cells transformation assays 9275.
tetrazolium bromide, oospores, spore germination, viability 805.
titanium chloride, bacteria 5922.
urine screening projects, bacteriuria 6784.
- Stains**,
antiseria + horseradish peroxidase conjugate, bovine diarrhea-mucosal disease virus, detection, microscopy 4147.
fluorescence, nuclear division, mitosis, *Tulaneella araneosa* 9330.
- Stalk rot**,
Erwinia chrysanthemi, *klorocin* disease control, *Zea mays*, tissues persistence 8929.
Fusarium bicolor, pathology, *Sorghum bicolor* 7966.
Fusarium graminearum, overwintering, crop residues, disease reservoirs, USA, Minnesota, *Zea mays* 7967.
Helianthus annuus, *Erwinia carotovora* susceptibility association age, USA, North Dakota 2820.
Phoma lingam, disease control, vinclozolin, *Brassica napus* 2903.
Phoma lingam, susceptibility, cultivars, *Brassica napus* 2814.
Zea mays, role, *Phialophora zeicola* sp. nov., South Africa 264.
- Stalks**,
Helianthus tuberosus, inulin fermentation, ethanol production, *Kluyveromyces marxianus* 5296.
- Standards**,
antibiotics production, packaging, USSR 493.
- Staphylococcus**,
Actinoplanes, antibiotic A-16686, biological properties, antibacterial activity 5571.
animal isolates, drug resistance 3996.
antibacterial activity, amoxicillin + clavulanic acid, antibiotic resistance 7438.
antibacterial activity, ciprofloxacin 4745.
antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 5465.
antibacterial activity, nitrofurantoin + bile acids 7358.
antibacterial activity, quinaldofur, penicillin, cow's milk, correlation, mastitis, disease control, cattle 5773.
antibacterial activity, rifamycin transport, phagocytes 7449.
antibiotic resistance, bactericidin, mechanisms, development 7329.
antibiotic resistance, bile, bile acids, effects on 6439.
antibiotic resistance, cattle isolates 3041.
antibiotic resistance, clinical isolates 6405.
antibiotic resistance, dilution tests, micro-methods, use, sodium chloride containing Mueller-Hinton agar 3012.
antibiotic resistance, oxacillin, methicillin, detection, use, AutoMicrobic test 2207.
antibiotic resistance, screening 7315.
antibiotic resistance, synthetic penicillins, methodology 3015.
antibiotic sensitivity testing, clinical isolates, mastitis, buffaloes 4810.
antibiotic sensitivity testing, photometry, computer applications 3076.
biliary tract infection, bile salts effects on antibiotics antibacterial activity 4042.
biochemical characteristics, identification, association, coagulase, methodology 787.
cattle animal isolates, API test identification 3271.
- Staphylococcus (continued)**
clinical isolates, β -lactamase, production, screening, media (culture), methodology 3350.
clinical isolates, antibacterial activity, aminoglycoside antibiotics 7444.
clinical isolates, antibacterial activity, bacitracin, vancomycin, oxacillin, gentamicin, streptomycin 4805.
clinical isolates, antibacterial activity, dibekacin 6541.
clinical isolates, antibiotic sensitivity testing 485.
clinical isolates, methicillin, antibiotic sensitivity testing, Italy 7441.
clinical isolates, moxalactam, antibacterial activity 5768.
clinical isolates, species identification, antibiotic sensitivity testing 3078.
contact lenses contamination, disinfectants solutions 5871.
contamination, dairy products, India, public health 1056.
contamination, feeds, slurries, sheep 7018.
detection, coagulase test 730.
differentiation, *Micrococcus*, bacitracin antibacterial activity, agar diffusion test 1661.
drug resistance, plasmids spread, phages role 9070.
enterotoxin A, enterotoxin B, production, purification 1948.
enterotoxin A multiple forms, purification, characterization 2769.
enterotoxin B, detection, skin tests, guinea-pigs, methodology 233.
enterotoxins, detection, enzyme-linked immunosorbent assay 1947.
enterotoxins, food contamination, enzyme-linked immunosorbent assay 8737.
enterotoxins, passive reverse hemagglutination, detection food contamination 7905.
enterotoxins, purification, characterization 8758.
fibronectin interactions, leukocytes (polymorphonuclear) phagocytosis, clindamycin effects on 514.
food contamination, minced meat 203.
identification, agglutination, slides, lectins 700.
identification, API test, methodology 3273.
identification, AutoMicrobic test 771.
identification, gas chromatography, computer programs 2498.
identification methodology, API test 759.
identification, methodology, comparison 666.
identification methodology comparison 3308.
identification methodology, media (culture), novobiocin resistance 1318.
identification methods, coagulase activity 2493.
incidence, catheters, polytet, comparison, polyvinyl chloride 3222.
indicator species, mortality, temperature, digestion (aerobic), sewage sludge 1485.
 β -lactamase biosynthesis, clinical isolates comparison 1813.
microbial pollution, chlorination, swimming pools 567.
Micrococcus, identification, methodology, comparison 7613.
norfloxacin drug sensitivity testing 9095.
oxacillin, resistance, dilution tests 4713.
proteolytic enzymes, dairy products isolates 1057.
sepsis experimental infection, oxytocin antibiotic synergism, antibacterial activity, clinical trials 6585.
triacylglycerol lipase, physicochemical properties 4316.
- Staphylococcus aureus**,
2-acetylpyrimidine, 2-acetylquinoline, 1-acetylisoquinoline,
3-acetylisoquinoline, thiosemicarbazones, antibacterial activity 7372.
agglutination, detection, hepatitis B surface antigen, methodology 2443.
animal isolates, identification, biochemical analysis 3284.
animal isolates, mastitis, antibiotic resistance 9083.
antagonism, milk isolation bacteria 8707.
antibacterial activity, acetonyl salicylate 6464.
antibacterial activity, *Agelas* metabolites 9133.
antibacterial activity, aminoglycoside antibiotics, rifampicin, vancomycin, teichomycin 4815.
antibacterial activity, ammonium salts, heptacain 7541.
antibacterial activity, ampicillin esters 2266.
antibacterial activity, aztreonam, antibiotic synergism 6504.
antibacterial activity, cefamandole, in vivo, in vitro 6523.
antibacterial activity, ceftazidime 4827.
antibacterial activity, cephalosporins 3099.
antibacterial activity, cephalothin, ceftazidime 8351.
antibacterial activity, *Daemonorops draco* resin 2211.
antibacterial activity, extracts, *Baccharis crispa*, *Baccharis notoserigia* 4012.
antibacterial activity, fludalanine + pentazonide 6454.
antibacterial activity, formazans 9139.
antibacterial activity, hydroxycinnamic acids 5728.
antibacterial activity, mangostin, derivatives, isolation, *Garcinia mangostana* 4783.
antibacterial activity, moxalactam, ceftazidime 9186.
antibacterial activity, penicillinase inhibition, effects on, association, *Chlorophytia*, *Rhodophyta*, marine environment 8305.
antibacterial activity, penicillins 4842.
antibacterial activity, peptides analogues 2210.
antibacterial activity, pirimycin 6543.
antibacterial activity, pseudomonic acid 4727.
antibacterial activity, Pseudomonic acids 6555.
antibacterial activity, pyridine-2-azo-p-dimethylaniline cephalosporin, β -lactamase indicators 501.
antibacterial activity, *Rhynchosia suaveolens*, biphenyls, derivatives 9096.
antibacterial activity, rifamycin + oxacillin 6356.
antibacterial activity, spices, *Salvia officinalis* 8719.
antibacterial activity, synthetic transaminase, analogs 5787.
antibacterial activity, teichomycin, fusidic acid, flucloxacillin, tostomycin, vancomycin 7422.
antibacterial activity, temocillin, antibiotic synergism, β -lactam antibiotics 3122.
antibiotic FCE 22101 antibacterial activity 1431.
antibiotic MDL 19,592, antibacterial activity 1389.
antibiotic resistance, animal isolates, cattle, dairies, antibiotics administration 430.
antibiotic resistance ermC gene, ermD gene, gene regulation, role protein biosynthesis, ribosomes 6427.
antibiotic resistance, erythromycin, reviews 9055.
antibiotic resistance, gentamicin uptake 9074.
antibiotic resistance, imipenem, methicillin 4708.
antibiotic resistance, methicillin, quality control, clinical microbiology 4688.
antibiotic resistance, resistance, antibiotic sensitivity testing, erythromycin, clindamycin, gentamicin, tetracycline 7424.
antibiotic resistance, reviews 9060.

Staphylococcus aureus, (continued)

- antibiotic sensitivity testing equipment 3093.
antibiotic sensitivity testing, penicillin 9193.
antibiotic sensitivity testing, ticarcillin= clavulanic acid 4786.
antibiotic tolerance, oxacillin, dilution tests comparison 6435.
antibiotics antibacterial activity determination, counting methods 2239.
antigens detection, enzyme-linked immunosorbent assay methodology 1596.
antimicrobial activity, antimicrobial agents, tissue culture, Peganum harmala 8336.
antimicrobial activity, atranorine 4781.
antimicrobial agents antibacterial activity, urine specimens 3048.
antiseptics antibacterial activity, surfactants effects on 9261.
antiserum activity, antibiotic sensitivity testing, antibiotic synergism, rifampicin, vancomycin 7413.
bacterial activity, antibiotic sensitivity testing, dilution tests 7425.
bacterial activity, bacteriostasis, propolis 9093.
bacterial activity, mikamycin 3151.
bacterial activity, nalidixic, tobramycin, gentamicin, serum assays, treatment, endocarditis, rabbits 478.
bacterial activity, povidone-iodine 452.
bacterion phenotypes detection, *Corynebacterium renale* indicator species use 4883.
bacteriostasis, catecholamide, iron chelating agents 448.
biotyping, contamination, poultry, food processing, meat industry 6179.
biotyping methodology 6762.
capsules polysaccharides, purification, characterization 6888.
carapenes, antibacterial activity, structure-activity relationships 7461.
carassenes, butylates 6199.
Carica papaya, plant extracts antibacterial activity *Staphylococcus aureus* 2220.
cattle animal isolates, API test identification 3271.
cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1388.
ceftazidime antibacterial activity, agar diffusion test 2259.
ceftriaxone antibacterial activity, agar diffusion test 1392.
cephalosporins antibacterial activity 9193.
clinical isolates, β -lactamase levels, relationship, antibiotic resistance, heavy metals resistance 2203.
clinical isolates, antibacterial activity, bactericidal activity, dibekacin, gentamicin, tobramycin 6540.
clinical isolates, antibiotic resistance, relationship, protein A biosynthesis 6054.
clinical isolates, antibiotic resistance, West Indies 5707.
clinical isolates, antibiotic sensitivity testing, antibiotic resistance, R factors characterization 9178.
clinical isolates, enterotoxins biosynthesis, antibiotic resistance, penicillin G 2199.
clinical isolates, enzymes, purification, characterization, role, antibiotic resistance 5165.
clinical isolates, identification, latex agglutination 685.
clinical isolates, identification, latex agglutination, coagulase assays 2502.
coagulase biosynthesis, release 4339.
contamination, poultry meat products 1049.
cross-resistance, methicillin, cephalosporins 6412.
endo-4'-deoxy-4'-sulfonamido-oleandomycin, derivatives, comparison, oleandomycin, erythromycin, antibacterial activity 3121.
detection methicillin, antibiotic resistance methodology 6765.
detection methodology, β -lactamase production relationship 3286.
differential diagnosis, agglutination, comparison coagulase test 7586.
dicloine effects on cell membranes 8306.
disc-diffusion test, use, Mueller-Hinton agar 3077.
disinfection, lactic acid bacteria antagonism, hospitals 3227.
drug resistance plasmids, clinical isolates 4705.
drug sensitivity testing, drug resistance association 2243.
drug sensitivity testing, milk isolates, cattle 6462.
Ede+methammine+antimicrobial agents antibacterial activity 4816.
endo- β -N-acetylglucosaminidase isolation, characterization 4324.
endocarditis, bacteremia, measuring techniques, antibodies, teichoic acid, comparison, α -hemolysin, diagnosis, man 7620.
enterobacterial common antigen, agglutination, immunodiagnosis, infection 5911.
enterotoxin A, enterotoxin B, enterotoxin C, slides assays 4489.
enterotoxin A production, thermal injury 7713.
enterotoxin A, radioimmunoassay, food 1442.
enterotoxin B, enterotoxin C1, chromatofocusing, characterization 1086.
enterotoxin C3, isolation, characterization 8751.
enterotoxins production, coagulase analysis, mastitis isolates, cattle 231.
enterotoxins production, factors affecting 4475.
enterotoxins production, phage typing, serotyping, clinics, foods 4479.
enumeration, food, membrane filtration, enzyme immunoassay, methodology 6968.
enumeration methodology, fibrinogen agar media, food contamination 6183.
enumeration, swimming pools, media (culture), methodology 1822.
epidemics, burns unit, environmental conditions, man 2410.
epidemiology markers, phage typing, antibiotic resistance, plasmids 6782.
exotoxin A, exotoxin B, electrophoresis assays 4480.
exotoxins, purification, characterization 4482.
extracellular enzymes, proteinase, isolation, characterization 8608.
R factors transfer, antibiotic resistance 9044.
fatty acid composition, antibiotic AL-87 resistance association 7313.
fibrinectin interactions, antibiotics effects on 495.
L form growth, pipemidic acid antibacterial activity 9097.
gentamicin, antibiotic sensitivity testing, quality control, mathematical models 1400.
gentamicin bacteriostasis, bone fatty acids, synergism, antagonism 4052.
growth, blood culture, correlation, hypertonicity, antibiotics 783.
growth, contamination, canned food, corned beef 6180.
growth, enterotoxins production, initiation phase 5381.
growth inhibition, *Allium sativum* extracts antibacterial activity 4747.
growth, pH, water activity, temperature, cheese 6960.
growth, storage, eggs 6969.
growth, toxins production, sodium chloride effects on 8760.
Helianthus annuus, trachyloban-19-*o*-ic acid, kaur-16-an-19-*o*-ic acid, isolation, antibacterial activity 4009.
 δ -hemolysin, amino acid sequence 5390.
hydrogen peroxide antibacterial activity mechanisms 4007.
identification, agglutination, slides, lectins 700.
identification, blood culture, agglutination tests 1625.
identification methodology 5072.
identification methodology, thermocasease activity detection, blood culture

Staphylococcus aureus, (continued)

1655.
identification, polymyxin susceptibility 8547.
inactivation, cooking, eggs 1050.
inactivation, poultry, cooking, microwave oven 1048.
inhibition, growth, role Maillard reaction products 7357.
 β -ionone, derivatives, retinol, antibacterial activity 6491.
killing, leukocytes phagocytosis, ansamycin antibacterial activity relationship 2288.
 β -lactam antibiotics resistance, penicillin-binding protein affinity role 5712.
 β -lactam antibiotics tolerance 6418.
 β -lactamase, antibiotics deactivation, guinacillin, cephaloridine substrates 5156.
 β -lactamase biosynthesis, clinical isolates comparison 1813.
 β -lactamase, role, antibiotic resistance, mezlocillin 3008.
latex agglutination, identification 5030.
lincomycin antibacterial activity, enzymes biosynthesis inhibition 9197.
lipids, extraction methodology, lysoctaphin use 7578.
lipoteichoic acid, release, cefmetazole, comparison, β -lactam antibiotics, antibacterial activity 1393.
media (selective) 5071.
membranes lipids metabolism, lipoteichoic acid biosynthesis role 4266.
mercury, resistance, effects on, biological properties 440.
methicillin, antibacterial activity, ATP bioassays, alkanal monooxygenase (FMN-linked) 4069.
methicillin, antibiotic resistance, disc-diffusion test, detection 7346.
methicillin, antibiotic resistance, disc-diffusion test, in vitro, β -lactam antibiotics antibacterial activity 7343.
methicillin resistance 6436.
methicillin resistance, AutoMicrob test 4714.
methicillin resistance, diffusion tests 4712.
methyllidrazine derivatives antibacterial activity 2219.
mice animal isolates, selection, penicillin antibiotic resistance 443.
most probable number 747.
norfloxacin disc-diffusion test, bacteria, standardization 3047.
novobiocin susceptibility, agar media 1422.
nuclease, assays, identification 3353.
pathogenicity quantitation methodology, clinical isolates 786.
penicillin, antibiotic resistance, antibacterial activity, cefuroxime, cefotaxime 4826.
penicillin-binding protein, isolation 5110.
peptidoglycans detection, enzyme-linked immunosorbent assay methodology, penicillin administration association 3344.
peritonitis, disease control, U.V. radiation, decontamination, dialysis, man 6718.
phagocytosis, rifamycin interaction leukocytes 7450.
phagocytosis, viability, antibiotics, antibacterial activity, photometry, methodology 6771.
plant extracts, Citrullus colocynthis, Corchorus depressus, Fagonia cretica, Lycium barbarum, antimicrobial activity 8339.
plasmids, antibiotic resistance, gentamicin, transposition 9066.
plasmids extraction micromethods 7599.
plasmids, mediation gentamicin antibiotic resistance 7327.
protein A, membrane filtration, infection diagnosis, herpes simplex virus, varicella-zoster virus 5889.
protein A, radioactive labelling, use, radioimmunoassay association Bacillus anthracis 8480.
protein A, radioimmunoassay, enkephalin 1606.
recovery, blood culture 584.
recovery, laundry, methodology 5859.
RNA polymerase (DNA-dependent), rifandin effects on 8358.
septicemia detection, liquid culture methodology, man 2466.
serological activity, antibiotic sensitivity testing, media comparison, infection, man 4788.
spillage, freeze-thawing storage effects on, beef, poultry 6975.
survival, factor affecting, freeze drying, minced meat 7037.
survival, freezing, mofongo, pork+plantains 7859.
survival, oil samples 9040.
survival, pasteurization, cheese 1902.
temperature, effects on, growth, beef 7029.
thermal stability, coagulase 8565.
toxic shock syndrome exotoxins biosynthesis, inhibition, clindamycin 7116.
toxic shock syndrome toxins, biosynthesis, purification 3752.
toxic shock syndrome, toxins markers, detection methodology 1084.
toxin B, X-ray crystallography 621.
 α -toxin detection, enzyme-linked immunosorbent assay methodology 4186.
triacylglycerol lipase, purification, characterization 7747.
ultrastructure, growth, antibacterial activity, rifampicin, oxacillin 7448.
Staphylococcus epidermidis,
antibacterial activity, aminoglycoside antibiotics, rifampicin, vancomycin, lysozyme 4815.
antibiotic resistance, animal isolates, cattle, dairies, antibiotics administration 430.
antibiotic synergism, rifampicin, antibacterial activity 8359.
cattle animal isolates, API test identification 3271.
cell adhesion, surfaces hydrophobicity, polymers, medical dressings 8428.
clinical isolates, enzymes, purification, characterization, role, antibiotic resistance 5165.
detection, Bacter test, comparison, lysis centrifugation, man 3313.
detection methodology, β -lactamase production relationship 3286.
identification methodology comparison 3308.
 β -lactamase biosynthesis, clinical isolates comparison 1813.
novobiocin, antibiotic resistance, MS-2 system 434.
penicillin, antibiotic resistance, antibacterial activity, cefuroxime, cefotaxime 4826.
peptide antibiotics biosynthesis, purification, biological properties 2258.
peritonitis, disease control, U.V. radiation, decontamination, dialysis, man 6718.
Staphylococcus hominis,
cattle animal isolates, API test identification 3271.
Staphylococcus hylus,
identification, API test 719.
Staphylococcus intermedius,
animal isolates, identification, biochemical analysis 3284.
 β -lactam antibiotics antibacterial activity, agar diffusion test,

- Staphylococcus intermedius**, (continued)
 β -lactamase effects on 9157.
- Staphylococcus saprophyticus**,
 endo- β -N-acetylglucosaminidase isolation, characterization 4324.
 identification methodology 7571.
 identification methodology comparison 3308.
 identification, novobiocin resistance 4692.
 identification, urine, methodology 3306.
 novobiocin susceptibility, agar media 1422.
 L-phenylalanine conversion, phenethyl alcohol production, cheese ripening 6993.
 strains, urease biosynthesis 2571.
- Staphylococcus simulans**,
 endo- β -N-acetylglucosaminidase isolation, characterization 4324.
- Staphylococcus xylosum**,
 skin microflora, antiseptics disinfection, animal models 4141.
- Starch**,
 accumulation, *Brassica pekinensis*, turnip yellow mosaic virus, infection, effects on 5863.
 amylolytic enzymes pretreatment, sugars fermentation, ethanol production, *Zymomonas mobilis* 8663.
 degradation products, use α -amylase assays, *Aspergillus oryzae* 7677.
 degradation, 2,3-butanediol production, *Aeromonas hydrophila* 5226.
 fermentation, enzymatic activity measurements, solid wastes 545.
 fermentation, ethanol production 8662.
 fermentation¹, *Schwanniomyces castellii*, factors affecting 197.
 fermentation, single-cell protein, *Schwanniomyces castellii* 1721.
 fungi, utilization, *Metroxylon sagu* 8686.
 hydrolysis, α -amylase, bacteria, sucrose production, industries 53.
 hydrolysis, α -amylase, microorganisms, food industry 51.
 hydrolysis, exo-1,4- α -D-glucosidase, immobilized enzymes, *Rhizopus niveus*, reactors 112.
 hydrolysis, flour, baking industries, α -amylase, fungi 198.
 hydrolysis, immobilized enzymes, exo-1,4- α -D-glucosidase 3535.
 hydrolysis inhibitors, glycoproteins, exo-1,4- α -D-glucosidase, purification, characterization, *Aspergillus* 3500.
 hydrolysis, paper, enzymes, fungi 49.
 processing, immobilized enzymes, *Aspergillus niger*, *Klebsiella aerogenes*, *Bacillus coagulans* 111.
 residues, food industry, single-cell protein production, *Aspergillus*, *Rhizopus*, *Penicillium* 1713.
 Zea mays, sweeteners production, immobilized enzymes, microorganisms 5188.
- Starter cultures**,
 actinomycetes, yeasts, aroma, sausages 7858.
 bacon, ham 3709.
 cattle bile resistance, effects on viability, freeze-drying, malolactic fermentation, wine, *Leuconostoc oenos* 6125.
 cheese, books 5095.
 dry yeasts 5339.
 drying, storage, viability, malolactic fermentation, wine, *Leuconostoc oenos* 7816.
 fermented food, sausages, phage ϕ infection, *Lactobacillus plantarum* 5333.
 growth, vitamins effects on, *Leuconostoc oenos* 5269.
 lactic acid bacteria, inhibition *Clostridium botulinum* growth, packaging, films, oxygen permeability, luncheon meat 7023.
 lactic acid bacteria, meat products 6961.
 lactic acid bacteria, quarg production, organoleptic properties 1054.
 meat product 5322.
 methanogenesis, manure, waste treatment, methanogenic bacteria 2340.
 Penicillium, meat products 7840.
 phase 52 infection, sausages fermented food, *Lactobacillus plantarum* 5334.
 sausages 6188.
 sausages, *Lactobacillus* 1900.
 sherry production, *Saccharomyces* 993.
 Streptococcus cremoris, intracellular proteinase, stimulation cheddar cheese ripening 193.
 thermophilic microorganisms, competition, composting, bark 4103.
- Statistical analysis**,
 growth kinetics, batch culture, *Candida utilis* 800.
- Steam**,
 decontamination, *Salmonella*, feeds, chickens 1066.
 disruption, cell walls, lignocelluloses, cellulase, hydrolysis 5278.
 heat transfer, sterilizers, canning 7036.
 +high pressure carbon dioxide, pretreatment, lignocelluloses, cellulase hydrolysis, crop residues 1748.
 pasteurization, freezing, spoilage, *Clostridium botulinum* type E toxins production, seafood, *Crassostrea virginica* 5364.
 pretreatment, lignocelluloses, biodegradation, Chaetomium cellulolyticum, Sporotrichum pulverulentum, single-cell protein production 1712.
 pretreatment, straw, biodegradation, Chaetomium cellulolyticum, liquid culture 2696.
 seed treatments, *Lobelia erinus*, disease control, Alternaria tenuis 2062.
 sterilization, *Bacillus stearothermophilus* indicator species, quality control, efficacy 476.
- Stearic acid**,
 solubility, biodegradability, microorganisms 6158.
- Steccherinum fimbriatum**,
 soil, mycelia growth, development 401.
- Steel**,
 corrosion, *Desulfotomobium vulgaris*, *Vibrio anguillarum* effects on 2722.
 surfaces, disinfectants antibacterial activity, *Pseudomonas aeruginosa* 5862.
- Stellaria**,
 hosts, tobacco ringspot virus, tomato ringspot virus 3818.
- Stem blight**,
Didymella bryoniae, Cucumis, benzimidazoles, resistance 1223.
- Stem canker**,
 Alternaria alternata f.sp.lycopersici, Lysopersicon esculentum, greenhouses, Greece 9013.
- Botryosphaeria corticis**, *Vaccinium corymbosum*, *Vaccinium ashei* 5466.
 Botryosphaeria dothidea, *Rubus* 8841.
 Cylindrocylindrium scoparium, Eucalyptus grandis seedlings, disease control 6324.
 Didymella lycopersici, disease control, solar radiation, Lycopersicon esculentum 2847.
 Helianthus annuus, Diaporthe helianthi infection, USA, Texas 3839.
 Hymphoxylon mammatum, Populus tremuloides, virulence, pathogenesis, disease resistance 8174.
 Leptosphaeria maculans, post-pathogen interactions, cultivars, Brassica napus
- Stem canker**, (continued)
 8040.
 Phomopsis, Helianthus annuus 7194.
- Stem pitting**,
 tomato ringspot virus, disease reservoirs, Taraxicum officinale, vectors, Xiphinema, USA, Pennsylvania, Prunus persica 8811.
- Stem rot**,
 Arachis hypogaea, Sclerotium roffii, epidemiology, factors affecting 6239.
 Cucumis sativus, Didymella bryoniae ascospores incidence 278.
 Medicago sativa, disease control, benomyl, Sclerotinia 5527.
 Phytophthora cinnamomi, Robinia pseudoacacia, new records, China, People's Rep 369.
 Phytophthora megasperma f.sp.glycinea, virulence, Glycine max, USA, New York 8776.
 Phytophthora mexicana, Dieffenbachia maculata 1154.
 post-harvest decay, oranges, disease control, fungicides 5470.
 Rhizoctonia, Pisum sativum, factors affecting disease resistance 1199.
 Rhizoctonia solani, disease resistance, Pisum sativum, plant breeding 2852.
 Rhizoctonia solani, Pisum sativum, disease resistance 1201.
 Sclerotinia sclerotiorum, Glycine max, agricultural practices effects on pathogenesis 1120.
 Sclerotinia sclerotiorum, planting timing effects on, Cicer arietinum 5412.
 Sclerotinia triflorum, disease resistance, selection, Medicago sativa 5485.
 Sclerotinia triflorum, pathogenicity, inoculum density, Trifolium 2783.
 Sclerotium roffii, Arachis hypogaea, spatial distribution, crop fields, USA, North Carolina 7134.
- Stem rust**,
 geographical distribution, association, genes, virulence, Puccinia graminis f.sp.tritici 7972.
 Puccinia graminis, inheritance disease resistance, Triticum aestivum 6293.
 Puccinia graminis f.sp.tritici, disease resistance, Agropyron elongatum, transfer, recombination, Triticum aestivum 314.
 Puccinia graminis f.sp.tritici, disease resistance, inheritance, Sr gene, Triticum aestivum 315.
 Puccinia graminis f.sp.tritici, disease resistance, Puccinia helianthi induction, Triticum aestivum 293.
 Puccinia graminis f.sp.tritici, epidemiology, disease resistance, Austna, Triticum aestivum 6244.
 Puccinia graminis f.sp.tritici, hypersensitive response, lignin biosynthesis, Triticum aestivum 2059.
 Puccinia graminis f.sp.tritici, pathogenesis, disease resistance, Triticum aestivum genotypes 8885.
 Puccinia graminis f.sp.tritici, Triticum aestivum seedlings, linkage analysis 258.
 Puccinia graminis f.sp.tritici, urediniospores 2790.
 Puccinia graminis f.sp.tritici, urediniospores, disease transmission, brome mosaic virus, Triticum aestivum 2789.
 Puccinia graminis f.sp.tritici, virulence genes, plant breeding, Triticum aestivum, books 4239.
 virulence genes, host-pathogen interactions, disease resistance genes, plant breeding, Triticum aestivum 2858.
- Stemphylium**,
 leafspot, Medicago sativa, Australia 5435.
- Stemphylium botryosum**,
 stemphylium α -1, X-ray crystallography 1954.
- Stemphylium drummondii sp.nov.**,
 imperfect state, Phlox drummondii leafspot etiology, Pleospora drummondii sp.nov. 2039.
- Stemphylium lycopersici**,
 post-harvest decay, papaya, pathogenesis 1164.
- Stemphylium vesicarium**,
 spot, pathogenesis, Asparagus officinalis 8845.
- Stemphyloxin I**,
 X-ray crystallography, Stemphylium botryosum 1954.
- Stems**,
 Aeschynomene indica, nodulation, Rhizobium physiology characterization 2155.
 Erwinia carotovora soft rot, Solanum tuberosum, Chile 2015.
 lesions, Pinus eliottii var.elliottii seedlings, fusiform rust, Cronartium quercum f.sp.fusiforme 7234.
 Mentha piperita, Verticillium dahliae distribution, disease resistance relationship 7204.
 nodulation, Rhizobium, Aeschynomene 9010.
 Phytophthora cinnamomi, lesions development, Phytophthora cinnamomi infection, phloem 3842.
 Solanum tuberosum, Erwinia carotovora subsp.carotovora, virulence, pathogenesis 2817.
- Stenotaphrum secundatum**,
 Rhizoctonia brown patch, pathogenesis 1127.
 white rot, detritus effects on pathogenesis, fungi 8785.
- Stereochemistry**,
 penicillin biosynthesis pathway, Cephalosporium acremonium 6519.
- Stereoselectivity**,
 oxidation, phenanthrene, anthracene, Cunninghamella elegans 2188.
 Traclyglycerol lipase, hydrolysis, methyl-2-chloropropionic acid, esters production, *Candida cylindracea* 7769.
- Stereospecificity**,
 lactic acid, enantiomers production, use 2-haloacid dehalogenase 8517.
- Sterium frustulosum**,
 enzymes, biodegradation, wood, lignin 1022.
- Sterium gausapatum**,
 disease resistance, suberin characterization, defense mechanism, Quercus robur 7235.
- Sterium rugosum**,
 biodegradation, coconuts fibers, Ascomycetes, Deuteromycetes, effects on 1031.
- Sterium sanguinolentum**,
 decay fungi, wound infection, bacteria inhibition, Picea abies 7238.
- Sterigmatocystin**,
 Aspergillus versicolor, post-harvest decay, distribution, Oryza sativa 8875.
 conversion, *Aspergillus parasiticus* cell free system, aflatoxin B1 biosynthesis 2760.
 identification, Penicillium food contamination cheese 7080.
- Sterility**,
 air, filters, fermenters 8506.
 air, gases, membrane filtration, fermenters 8505

Sterility, (continued)

filtration, fermenters, conferences 9348.

Sterility testing,

pharmaceuticals, veterinary medicine, membrane filtration, viruses 7395.
sterilizers 1369.

Sterilization,

antibiotics, radiation 1378.
autoclaves, degradation, glucose ammonium tartrate, media (culture), liquid culture 8490.
Bacillus licheniformis spores, canning, tomatoes 7033.
bacteria, reviews 2236.
books 1695.
cycles, *Bacillus subtilis* var. *niger* spores, ethylene oxide resistance 4035.
dentistry, environmental hygiene 1519.
ethylene oxide, medical equipment 1361.
ethylene oxide, medical equipment 8341.
food, books 4240.
glutaraldehyde 1362.
heat 1360.
heat, spores, microorganisms 1368.
hygiene, disinfection, *Brewer's* 7547.
ionizing radiation 1363.
medical instruments, dental manipulation, bioassays, inactivation, spores, *Bacillus subtilis*, *Bacillus stearothermophilus* 7545.
membrane filtration 1365.
microwave radiation, food, laminar air flow nosocomial environments, man 574.
oil, continuous culture, antibiotics production, fermenters 9154.
pharmaceuticals, fungi, viruses 9144.
pharmaceuticals, microorganisms contamination, books 9343.
pharmaceuticals, reviews 9145.
Pseudomonas, environmental hygiene 1516.
quality control, pharmaceuticals 9146.
soil, methodology 1268.
solutions, propylene oxide, chlorhexidine diacetate, *Bacillus subtilis* var. *niger* spores 4784.
starch, *Bacillus stearothermophilus* indicator species, quality control, efficacy 476.
sterility testing 1369.
synergism, ultrasound+heat treatment, *Streptococcus faecium* 4034.
U.V. radiation 1364.
ultrahigh temperature, food, reviews 7032.
ultrahigh temperature, heat inactivation α -amylase, *Bacillus stearothermophilus*, *Xanthomonas campestris*, dairy products 6974.

Sterilizers,

canning, steam, heat transfer 7036.
flame sterilization, temperature monitoring, canned food 7022.

Sterility testing 1369.**Steroid reductase,**

purification, characterization, *Mycobacterium* 5148.

Steroid $\Delta 1$ -dehydrogenase,

isozymes, purification, substrate specificity, *Corynebacterium* 64.

Steroids,

acetic acid, *Streptomyces albus* fermentation 6049.
conversion, immobilized cells, *Saccharomyces cerevisiae*, *Arthrobacter globiformis* 104.
microorganisms biosynthesis, books 2541.
production, immobilized cells, *Nocardia rhodochrous* 3525.
production, sterols conversion, immobilized cells, *Mycobacterium phlei* 4357.
steroid composition, lipid, production, *Rhodotorula glutinis* 5217.
Schizosaccharomyces pombe membranes, drug resistance relationship 3990.

 $\Delta 24$ -Sterol methyltransferase,

activity, azasterol inhibition, kinetics, *Saccharomyces cerevisiae* 7718.

Sterols,

biodegradation, *Mycobacterium aurum*, biosynthesis, progesterone, 1-dehydroprogesterone 946.
conversion, sterols production, immobilized cells, *Mycobacterium phlei* 4357.
Glycine max, fermentation, *Nocardia coralina*, 19-norsteroids intermediates 1823.
inhibitors, disease control, scab, *Venturia inaequalis*, *Malus* 3881.

Stichococcus bacillaris,

+identifying bacteria, nitrogen removal, rotating discs, wastewater treatment, industrial effluents, fertilizers 9236.

Stilbene,

derivatives, antifungal activity 8309.

Stimulants,

Candida tropicis, activity, association, *Streptomyces levis* levorin biosynthesis 2318.

Stimulators,

anthracynine biosynthesis, differentiation, *Streptomyces bikiniensis*, *Streptomyces cyaneofuscus* 116.

Stoichiometry,

coupling factor 1 subunits, use monoclonal antibodies, immunoelectron microscopy, *Escherichia coli* 3479.

Stomata,

size distribution, *Triticum* \times *Secale cereale* leaves, *Puccinia recondita* rust incidence 7955.

Stone,

microorganisms biodegradation, books 1663.

Storage,

blood vessels prosthetics, penicillin binding, effects on antibacterial activity 2418.
Chlamydia trachomatis, media (culture)+temperature effects on 5079.
eggs, coliforms, *Salmonella*, *Staphylococcus aureus*, growth 6969.
feces, effects on *Salmonella* isolation 5051.
feeds, buildings, isolation, fungi pathogens 582.
Hordeum vulgare grain, Penicillium isolation, identification 7197.
packaging, effects on bacteria growth, spoilage 4465.
phototrophic bacteria, nitrogen (liquid), anaerobic conditions 4215.
soil, anaerobic conditions, effects on soil microorganisms, use land reclamation 5688.
soil, vesicular-arbuscular mycorrhizas restoration, land reclamation, gravel pits 1253.
starter cultures, viability, malolactic fermentation, wine, *Leuconostoc oenos* 7816.
temperature, effects on coliforms enumeration, drinking water 564.
wine, acetic acid bacteria succession 6134.

Storage conditions,

anaerobic environments, *Neisseria gonorrhoeae* 735.
carbon monoxide, prevention, post-harvest decay, grapes 8057.
effects on *Aspergillus flavus* aflatoxins biosynthesis, *Nicotiana tabacum* leaves 7092.
effects on *Bacillus subtilis*, hexamethylene diamine, biodegradation 1007.
effects on chickens feeds, mycoflora, aflatoxins biosynthesis, accumulation 7094.
pasteurized milk quality, heat treatments 8711.
wood, *Quercus*, survival, wilt, *Ceratocystis fagacearum* 8956.

Straw,

ammonia treatment, biodegradation 6953.
biodegradation, cellulolytic bacteria 6148.
biodegradation, Chaetomium cellulolyticum, pretreatment, steam, ammonia, liquid culture 2696.
biodegradation, kinetics, polysaccharides biosynthesis, microorganisms 7266.
biodegradation, nutrient microorganisms, chemical composition association 2695.
biodegradation, soil microorganisms, interaction, carbon, nitrogen, agricultural ecosystems 2699.
composts, *Triticum aestivum*, *Vicia faba*, thermophilic fungi 6168.
decomposition, bacteria polysaccharides formation 6051.
decomposition, nitrogenase activity measurement, soil 7292.
decomposition, nutrient cycles, soil microorganisms, *Hordeum vulgare* 5683.
digestibility, sheep, silage, urea treatment 1067.
effects on, lactic acid bacteria acid production, silage fermentation, *Zea mays* 7873.
fermentation, Chaetomium cellulolyticum, single-cell protein production, reactors, straw, *Triticum aestivum* 1711.
fermentation, fractionation, Basidiomycetes 155.
fermentation, yeasts biomass production 8526.
Hordeum vulgare, decomposition, soil microorganisms, leaching effects on 2942.
Hordeum vulgare, pretreatment, use, alkalis, cellulase, effects on bacteria fermentation 1045.
lignin biodegradation, *Cyanthus* 3653.
lignocelluloses fermentation, white rot, optimization, *Triticum aestivum* 1887.
lignocelluloses, sodium hydroxide hydrolysis, acid production, methanogenesis, methanogenic bacteria 9032.
mycotoxins identification, mycoflora, *Oryza sativa* 7093.
Oryza sativa, bagasse, microwave radiation pretreatment, cellulose, *Trichoderma viride* 5128.
Oryza sativa, digestion (aerobic), methanogenesis, effects on digestibility, cattle 7875.
Oryza sativa, utilization, *Trichoderma harzianum*, production, single-cell protein, cellulase 3725.
residues, biodegradation, microorganisms, soil, factor affecting 7249.
soil amendment effects on *Bradyrhizobium japonicum*, population levels, rhizosphere, Glycine max 7282.
Triticum aestivum, basidiomycetes pretreatment, lignin biodegradation 1009.
Triticum aestivum, biodegradation, acids, *Trichoderma viride*, cellulase 6166.
Triticum aestivum, hemi-celluloses, trifluoroacetic acid hydrolysis, xylose fermentation, ethanol production, *Pachysolen tannophilus* 8657.
+turnips, feeds, digestibility, inhibition cellulolytic bacteria, rumen, cattle 1920.

Strawberry latent ringspot virus,

disease transmission, *Xiphinema diversicaudatum*, plants 6272.

Streak,

disease control, role, resistance association *Eriophyes tulipae*, *Triticum aestivum* 8075.

Streams,

factors affecting, microorganisms, biodegradation, *Pseudotsuga menziesii*, lignocelluloses 999.
water pollution, sewage removal, aeration, water treatment 8410.

Streptococcus,

Actinoplanes, antibiotic A-16686, biochemical properties, antibacterial activity 6571.
animal isolates, mastitis, antibiotic resistance 9083.
antibacterial activity, ciprofloxacin, comparison, norfloxacin, nalidixic acid 6465.
antibacterial activity, Pseudomonas 6555.
antibacterial activity, quinaldofur, penicillin, cow's milk, correlation, mastitis, disease control, cattle 5773.
antibiotic MDL 19,592, antibacterial activity 1389.
antibiotic resistance, antibacterial activity, tyrothricin, gramicidin 7477.
antibiotic resistance, antibiotic synergism, penicillin, streptomycin 444.
antibiotic resistance, reviews 9060.
antibiotic sensitivity testing, clinical isolates, mastitis, buffaloes 4810.
antibiotic sensitivity testing, photometry, computer applications 3076.
antibiotic sensitivity testing, use, tetracycline blue 3083.
antibiotic synergism, cefotaxime, aminoglycoside antibiotics 1382.
antibiotic tolerance 6434.
antigens detection, agglutination methodology, blood culture 2460.
API test, identification, methodology 3274.
bactericidal activity, *Mycobacterium* 3151.
bioassays, identification, clinical aspects, methodology 5075.
clinical isolates, antibacterial activity, dibekacin 6541.
dairy starters, acid production, strains synergism, cheese 7966.
dairy starters, mutants selection, streptomycin, antibiotic resistance 2730.
dairy starters, reviews 8710.
detection, swabs, latex agglutination, clinical isolates 5048.
disinfection, heat+hydrogen peroxide, septic tanks effluents 9243.
fermentation, cheese 3693.
food contamination, minced meat 203.
gas chromatography, detection, hippuric acid, fumaric acid, conversion, succinic acid, methodology 794.
groups, hyaluronidase production 8540.
 β -hemolysin, use, detection, hemolysis, *Vibrio cholerae* 9288.
 β -hemolytic, identification 720.
hydrocarbons, biodegradation, waste water, oil installations 2374.
identification, immunoelectrophoresis methodology 1649.
identification methodology, throat isolates, man 1669.
identification, Rapid STREP API test 3280.
identification, throat swabs, slides 717.
indicator species, chlorination, swimming pools 567.
indicator species, inactivation, waste water, marine environment 1499.
indicator species, mortality, temperature, digestion (aerobic), sewage sludge 1485.
indicator species, sewage sludge, ocean dumping, marine pollution 2389.

Streptococcus, (continued)

indicator species, survival, marine environment 2395.
 indicator species, wastewater treatment 2342.
 lactic acid bacteria, antibiotic resistance, phosphate, buffers, media (culture), effects on 5708.
 levels, wastewater treatment association aquaculture, Hypophthalmichthys molitrix, *Aristichthys nobilis* 1463.
 macrolide antibiotics, antibiotic resistance, plasmids, host range 3025.
 media (selective) 773.
 media (selective) 2490.
 penicillin antibiotic tolerance, methodology 435.
 penicillin tolerance, screening methodology 1308.
 polysaccharides, hydrolysis, fungi dextranase 8679.
 proteolytic enzymes characterization, role, milk products production, reviews 96.
 public health, leachates, waste disposal, landfills 3198.
 removal, inactivation, role, aluminum sulfate treatment, autrophic environments 9252.
 synthetic peptides, combined vaccines, *Corynebacterium diphtheriae* toxins, hepatitis B surface antigen, antibody response, mice 9219.
 tetracycline, antibiotic resistance, conjugation, gene transfer, transposons 6431.
 tetracycline, conjugation, gene transfer, transposons, *Streptococcus* 6431.
Streptococcus agalactiae,
 animal isolates, mastitis, antibiotic resistance 9083.
 cephalosporins antibacterial activity 9189.
 cystine, reduction, antagonism, lactoperoxidase, thiocyanate, hydrogen peroxide, antibacterial activity 3058.
 hemolysins, biosynthesis, characterization 3404.
 hyaluronidase production 8540.
 identification, CAMP test, agglutination 9311.
 media (culture), use, diagnosis, methodology 9325.
 pigment biosynthesis, animal isolates, clinical isolates 144.
 serotyping methodology 9322.
Streptococcus bovis,
 identification methodology 3299.
 media (isolation), membrane filtration, indicator species, water 5054.
Streptococcus cremoris,
 bacteriocins, antibacterial activity, role dairy starters 2311.
 dairy starters, autolysis, media (culture) carbon sources effects on 2733.
 dairy starters, casein production 7861.
 dairy starters, continuous culture, milk fermentation, yogurt production 6997.
 dairy starters, freezing, viability 4450.
 dairy starters, inhibition, milk 7882.
 dairy starters, prophages, DNA homology, lysis, phages 5335.
 dairy starters, proteinase deficiency, use Cheddar cheese production 2731.
 dairy starters, *Streptococcus lactis*, proteinase deficiency, temperature tolerance, lactic acid production 2732.
 inhibition, hypoxanthine, hydrogen, milk, dairy starters 7863.
 lactic acid production, growth, measurement techniques, dairy products 7867.
 proteinase, plasma membranes localization, role peptides, transport, proteolysis, milk 1747.
 starter cultures, intracellular proteinase, stimulation cheddar cheese ripening 193.
Streptococcus diacetylactis,
 dairy starters, casein production 7861.
Streptococcus durans,
 enumeration, identification, antibiotic susceptibility testing, sewage outfalls relationship 2256.
 fermentation, cheese 3693.
 fermentation, silage 7013.
 indicator species, incubation temperature, isolation, sediments, marine environment 8422.
 inoculum, silage 7012.
Streptococcus faecalis,
 antibacterial activity, aminoglycoside antibiotics, rifampicin, vancomycin, teichomycin 4815.
 antibacterial activity, ampicillin, vancomycin, N-formimidoyl thienamycin, antibiotic synergism, streptomycin, amikacin, sisomicin 4811.
 antibacterial activity, apicalin 4840.
 antibacterial activity, ciprofloxacin 4745.
 antibacterial activity, pyridine-2-azo-p-dimethylaniline cephalosporin, β -lactamase indicators 501.
 antibiotic resistance, aminoglycoside antibiotics 7330.
 antibiotic sensitivity testing 4808.
 antimicrobial agents antibacterial activity, urine specimens 3048.
 antiseptics antibacterial activity, surfactants effects on 9261.
 cephalosporins antibiotic sensitivity testing, media effects on 3095.
 clinical isolates, β -lactamase, association, antibiotic resistance, penicillin 7326.
 clinical isolates, antibiotic resistance, streptomycin, association, ribosomes 4697.
 endocarditis, animal models, antibacterial activity, gentamicin, \pm mezlocillin, \pm ampicillin 4838.
 fermentation, cheese 3693.
 hydrolyses, purification, characterization 8596.
 identification methodology 3299.
 indicator species, incubation temperature, isolation, sediments, marine environment 8422.
 protein kinase, isolation, characterization 8558.
 skin microflora, antiseptics disinfection, animal models 4141.
 tyrosine decarboxylase, assays, kinetics 93.
 variants, enumeration, identification, antibiotic susceptibility testing, sewage outfalls relationship 2256.
Streptococcus faecalis subsp. liquefaciens,
 effects on yolk, physicochemical properties 6982.
Streptococcus faecium,
 antagonism, intestinal microflora, colibacillosis prevention, chickens 1064.
 antibacterial activity, ampicillin, vancomycin, N-formimidoyl thienamycin, antibiotic synergism, streptomycin, amikacin, sisomicin 4811.
 antibacterial activity, dihydrochloric acid analogs, synthesis 6447.
 cephalosporins antibiotic sensitivity testing, media effects on 3095.
 identification methodology 3299.
 indicator species, incubation temperature, isolation, sediments, marine environment 8422.
 isolation, luncheon meat, biodegradation 2727.
 lactic acid fermentation, kinetics, yield 6818.

Streptococcus faecium, (continued)

plasmid pJK3 transfer, bacteriocins, biosynthesis, resistance 1418.
 sterilization, ultrasound + heat treatment, synergism 4034.
 triton X-100 resistance, penicillin, lysis 8352.
Streptococcus group A,
 agglutination, antigens detection 1595.
 antigens detection, agglutination methodology, blood culture 2460.
 bacteriocin typing, identification, methodology 7616.
 hyaluronidase production 4336.
 identification methodology, throat isolates, man 1669.
 isolation association, cotrimoxazole containing agar, atmospheric conditions 1666.
 throat infection, diagnosis, latex agglutination 693.
Streptococcus group B,
 agglutination, Phadebact test 752.
 antibacterial activity, amniotic fluid 2214.
 antibacterial activity, penicillin, rifampicin 8361.
 antibiotic tolerance, penicillin 7317.
 antibodies, enzyme-linked immunosorbent assay methodology, serum, man 3259.
 antigens detection, agglutination methodology, blood culture 2460.
 antigens detection, enzyme immunoassay methodology, man 5065.
 detection, identification, use pigments production 2475.
 enzyme-linked immunosorbent assay 721.
 Granada medium, media (selective) 3320.
 identification, carbohydrates monoclonal antibodies analysis, latex agglutination, immunoprecipitation 1629.
 identification, detection, media (selective) + latex agglutination 1609.
 identification methodology, genitourinary tract infection, pregnancy, man 2451.
 identification methodology, throat isolates, man 1669.
 immunofluorescence, clinical isolates, detection, identification 2477.
 p-aminobenzoic antibiotics susceptibility 1381.
 meningitis, diagnosis, cerebrospinal fluid Phadebact test, man 3321.
Streptococcus group C,
 antigens detection, agglutination methodology, blood culture 2460.
 antigens, identification methodology, agglutination 2495.
 hyaluronidase production 8540.
 identification methodology, throat isolates, man 1669.
Streptococcus group D,
 antibiotics antibacterial activity determination, counting methods 2239.
 antigens detection, agglutination methodology, blood culture 2460.
 cephalosporins antibiotic sensitivity testing, media effects on 3095.
 cephalosporins sensitivity 9188.
 enumeration, identification, antibiotic susceptibility testing, sewage outfalls relationship 2256.
 identification methodology 3299.
 indicator species, microbial pollution, sewage effluents, hydrology, estuaries 6710.
 norfloxacin drug sensitivity testing 9095.
 recovery, blood culture 584.
 urinary tract clinical isolates, identification, antibiotic sensitivity testing, methodology 3315.
Streptococcus group F,
 identification methodology, throat isolates, man 1669.
Streptococcus group G,
 antigens detection, agglutination methodology, blood culture 2460.
 bactericidal activity, gentamicin, antibiotic synergism, penicillin G, vancomycin, cefotaxime 7423.
 clinical isolates, antibiotic sensitivity testing 4814.
 hyaluronidase production 8540.
 identification methodology, throat isolates, man 1669.
Streptococcus group N,
 dairy starters, inhibition, milk 7862.
 dairy starters, phages contamination, reviews 210.
 inhibition, hypoxanthine, hydrogen, milk, dairy starters 7863.
 plasmids, DNA, isolation, methodology 5026.
Streptococcus lactis,
 acetaldehyde analysis, acetaldehyde 2,4-dinitrophenylhydrazine measurements, high-performance liquid chromatography 6927.
 agglutinins, dairy products, staining, immunoassays 3718.
 cloning vectors, transformation, lactose lac gene 6991.
 dairy starters, alcohol dehydrogenase activity 2576.
 dairy starters, autolysis, media (culture) carbon sources effects on 2733.
 dairy starters, cream production, flavorings, milk, buffaloes 2736.
 dairy starters, fermentation, glucose, lactose, limiting factors 6994.
 dairy starters, phase 646 (ML8) replication, Cheddar cheese production 4456.
 dairy starters, proteinase deficiency, temperature tolerance, lactic acid production 2732.
 dairy starters, protoplast fusion, plasmids, lac plasmid 8702.
 dairy starters, protoplasts production, use transformation 5952.
 fermentation, cheese 3693.
 fractions, phosphatidyl ethanolamine hydrolysis 1895.
 growth, toxins production, sodium chloride effects on 8760.
 lactose fermentation, characterization 1873.
 lactose fermentation, plasmids curing, temperature effects on, media (culture) 7864.
 lactose genes, cloning, role, fermentation, milk 2739.
 plasmid pSN conjugation, sucrose fermentation, nisin biosynthesis 3146.
 plasmids, DNA, transformation, *Streptococcus sanguis*, lactose metabolism, antibiotic resistance 6990.
 sugars fermentation, hydrogen peroxide bioaccumulation 2686.
Streptococcus lactis subsp. diacetylactis,
 dairy starters, autolysis, media (culture) carbon sources effects on 2733.
 dairy starters, continuous culture, milk fermentation, yogurt production 6997.
 fermented milk products, India 4453.
 immobilized cells, production, 2,3-butanedione, acetoin, dairy industry 6992.
 plasmid pNP40, transformation, phage c2 resistance, nisin antibiotic resistance, dairy starters 2196.
Streptococcus lactis subsp. lactis,
 dairy starters, phages infection, isolation, characterization 5337.
Streptococcus mitis,
 bactericidal activity, povidone-iodine 452.
 neuraminidase, purification, characterization 6005.
Streptococcus mutans,
 adsorption, bacteriocins, bactericidal activity 4882.
 antibacterial activity, aminoglycoside antibiotics, lipids, potentiation 9181.
 antibacterial activity, drug synergism, zinc, hexetidine 5860.

Streptococcus mutans, (continued)

- cytoplasm, proteins, electrophoresis 6806.
- dental caries, animal models, prophylaxis, endo-1,3- α -D-glucanase 4140.
- dental plaque, prophylaxis, sodium fluoride topical application, cancer patients 6730.
- 1,6- α -glucan branching enzyme, purification, characterization 27.
- D-glucan sucrose, substrate specificity 6830.
- 1,3- α -D-glucan synthase, 1,6- α -D-glucan synthase, isoelectric focusing 28.
- glucans biosynthesis 109.
- glucans, biosynthesis, riboflavin, inhibition 3155.
- growth, acid production, fluoride, effects on, dental plaque 7554.
- growth inhibition, relationship, microenvironments, chlorhexidine levels 1352.
- polysaccharides biosynthesis, role extracellular enzymes 8616.
- riboflavin, effects on, glucans, biosynthesis, enzymes 3157.

Streptococcus pneumoniae,

- antibacterial activity, pirimycin 6543.
- antibiotic resistance, penicillin, methicillin, quality control, clinical microbiology 4688.
- antibiotic sensitivity testing, β -lactam antibiotics, rifampicin, vancomycin, cotrimoxazole 6503.
- capsules polysaccharides, enzyme-linked immunosorbent assay, immunoglobulin G, immunoglobulin M 1662.
- capsules polysaccharides, structure 6052.
- capsules polysaccharides, vaccines, antibody response, enzyme-linked immunosorbent assay, children 682.
- clinical isolates, antibiotic resistance, penicillin, chloramphenicol, USA, Colorado 436.
- clinical isolates, identification, agglutination, Phadebat test 8465.
- clinical isolates, moxalactam, antibacterial activity 5768.
- clinical isolates, serotyping, antibiotic sensitivity testing 9153.
- detection, respiratory tract, anaerobic conditions, incubation 5908.
- identification, Phadebat test 684.
- in vitro diagnosis, latex agglutination comparison counter immunoelectrophoresis 5028.
- latex agglutination, detection, antigens, body fluids, man 3310.
- meningitis, diagnosis, cerebrospinal fluid Phadebat test, man 3321.
- meningitis, diagnosis, counter immunoelectrophoresis, agglutination, Gram stain, comparison, man 3275.
- meningitis, immunodiagnosis, counter immunoelectrophoresis, agglutination 2488.
- polysaccharides, oligosaccharides structure 1833.
- serotyping, use, agglutination, comparison, counter immunoelectrophoresis 3312.
- vaccines preparation 542.
- vaccines, use, lymphocytes B function analysis, man, reviews 3356.

Streptococcus pyogenes,

- antibacterial activity, pirimycin 6543.
- ceftazidime antibacterial activity, agar diffusion test 1392.
- clinical isolates, serotypes, antibiotic resistance, macrolide antibiotics 3018.
- erythromycin resistance 6402.
- erythromycin resistance, clinical isolates 5722.
- hyaluronidase production 8549.
- identification, bacteriophage typing methodology 9307.
- β -ionone, derivatives, retinol, antibacterial activity 6491.
- plasmids deficiency, erythromycin, tetracycline antibiotic resistance genetic markers, conjugation 6426.
- streptolysin O, role, false-positives, CAMP test 5906.
- toxin B, purification, characterization 1956.
- toxin C, purification, characterization 8752.
- toxins, isoelectric focusing, mitogenicity 2764.

Streptococcus sanguis,

- cell adhesion, hydroxyapatite, bioassays, optimization 5070.
- extracellular matrix, multiple forms, purification, characterization, proteolysis role, immunoelectrophoresis 6045.
- endodeoxyribonuclease, purification, characterization 4328.
- fructosyltransferase biosynthesis 943.
- leukocytes (neutrophilic) chemotactic factors, purification, characterization 2556.
- pill antigens, enzyme-linked immunosorbent assay methodology 1621.
- transformation, *Streptococcus lactis* plasmids DNA, lactose metabolism, antibiotic resistance 6990.

Streptococcus thermophilus,

- dairy starters, acid production, temperature tolerance 6187.
- dairy starters, fatty acids, lipids, biosynthesis, fermentation, milk 7865.
- dairy starters, propeptides production, use transformation 5952.
- dairy starters, yogurt, milk, buffaloes 6869.
- galactose utilization selection, lactose limitation continuous culture 6191.
- media (isolation), yogurt 7006.

Streptococcus viridans,

- blood culture, glucose addition 2497.
- clinical isolates, antibiotic resistance β -lactam antibiotics, penicillin-binding protein characterization 428.
- identification, Rapid STREP API test 3280.
- rifampicin antibacterial activity 6544.

Streptolydigin,

- Streptomyces lydicus, biosynthesis 1420.

Streptolysin O,

- Streptococcus pyogenes, role, false-positives, CAMP test 5906.

Streptomycetes

- acmycin, antifungal activity, Helminthosporium oryzae, Curvularia lunata 4869.
- actamycin, biosynthesis, association, 3-amino-5-hydroxybenzoic acid 1444.
- air spora preservation, liquid culture methodology 3292.
- alanine peptidase, active sites, binding, monobactams 4274.
- L-alanine, production, growth regulators, inhibition, molting, larvae, Leucania separata 7774.
- D-alanyl-carboxypeptidase-transpeptidase, X-ray crystallography, β -lactam antibiotics binding 3457.
- alginate A, alginate B, alginate C, antifungal activity, antibacterial activity 3136.
- 4-amino-3-chloro-2-pentenedioic acid, production, isolation, characterization 6582.
- antagonism, Azospirillum lipoferum, Azospirillum brasilense, role inoculum survival, soil 4658.
- anthracylcline antibiotics biosynthesis, differentiation, induces intracellular levels 6068.
- antibiotic M14201, production, purification, structure, antibacterial activity 3135.

Streptomycetes, (continued)

- antibiotic OA-6129D, antibiotic OA-6129E, structure, spectroscopy 7460.
 - antibiotic OM-173, taxonomy, production, antibacterial activity 2289.
 - antibiotic resistance, ribostamycin, kanamycin, novobiocin, destomycin, racemomycin, genes, cloning 1314.
 - antibiotic X-14885A, biosynthesis, isolation, biological properties 1432.
 - antibiotics biosynthesis, pH levels 2246.
 - antibiotics production, isolates, wastewater treatment 9234.
 - avarmycin biosynthesis, physicochemical properties, structure, antitumor activity, antibacterial activity 1447.
 - carbapenems structure 2300.
 - chymotrypsin inhibitors production 7658.
 - cloning vectors, antibiotics production 4845.
 - corks contamination, off flavor, wine 1870.
 - distribution, incidence, pasture, nematodes effects on 7295.
 - endo-1,3- β -D-glucanase production, carbon sources, agricultural wastes 3470.
 - genes cloning, β -D-galactosidase production 4039.
 - glucose isomerase, immobilized enzymes, mass transfer, mathematical models, reactors 5168.
 - glucose isomerase, production, characterization 2618.
 - L-glutamate oxidase purification, characterization 2574.
 - histidinomycin, purification, structure, antifungal activity 3137.
 - karabemycin biosynthesis, structure, antibacterial activity, gram-negative bacteria, gram-positive bacteria 1437.
 - β -D-mannosidase, β -1,4-mannooligosaccharide biosynthesis, mannans bioconversion 1745.
 - neopeptin, structure 4688.
 - potato common scab, Solanum tuberosum 6283.
 - production, indoles, gibberellins 8229.
 - proteolytic enzymes, isoelectric focusing 4288.
 - rhizosphere, inhibition Rhizobium, nodules, rhizosphere 6378.
 - serine proteinase, zinc proteinase, interaction oxyimino-cephalosporins, structure-activity relationships 6832.
 - scopolamine, herbicides antibacterial activity 4737.
 - soil microorganisms, aluminum phosphate utilization, phosphorus sources 2151.
 - streptothricin biosynthesis, arginine radioactive labelling, N.M.R. 6569.
 - streptothricin F biosynthesis, β -lysine formation 4844.
 - structure, antibiotic 2-11-A, antibiotic 2-11-B 6552.
 - subtilisin inhibitor, renaturation, denaturation kinetics, fluorescence 901.
 - sulfinil inhibitors, thermal denaturation, C.D. 7574.
 - tetracycline biosynthesis, fermenters, carbon dioxide pressure effects on 2281.
 - thiostreptomycin structure 3188.
 - triacylglycerol lipase, purification, characterization 4286.
 - trypsin, like enzymes, characterization, immobilization 7689.
 - virustomycin A structure 3165.
 - xylose isomerase production 5167.
- Streptomyces albobivineus,**
- antagonism, biological control, Dutch elm disease, inoculation, Ulmus americana 2890.
- Streptomyces albus,**
- antibiotic AN-3, biosynthesis, isolation, physicochemical properties, antibacterial activity, antitumor activity 1439.
- Streptomyces albus,**
- alanine carboxypeptidase, zinc containing, active sites inhibition, heavy metals, β -lactam antibiotics 5985.
 - antibiotic AN-1, production, isolation, characterization 4059.
 - chicamycin, production, isolation, characterization 6067.
 - fermentation, acetic acid steroids 6049.
 - glucosylphosphate isomerase biosynthesis, shake culture 3520.
 - L-lysine biosynthesis 3411.
 - salinomycin production, lipids carbon sources, fermentation, aeration 4874.
- Streptomyces ambofaciens,**
- 6-diazo-5-oxoheptanoic acid synthesis 1443.
- Streptomyces antibioticus,**
- avermectin, inhibition, Mucor miehei, chitin, metabolism 6578.
 - oleandomycin biosynthesis, agitation, aeration effects on 2277.
 - oleandomycin production, optimization 2276.
- Streptomyces auranticolor,**
- cardiolipids biosynthesis, structure, new records 2299.
- Streptomyces aureofaciens,**
- air spore preservation, liquid culture methodology 3292.
 - auromycin production, growth rate, sugar, carbon sources effects on anhydrotetracycline oxygenase 4860.
- Streptomyces avermitilis,**
- avermectins production, anthelmintic agents 120.
- Streptomyces biknensis,**
- stimulators, anthracycline biosynthesis, differentiation 116.
- Streptomyces braegensis,**
- antibiotic U-64846 biosynthesis, isolation, characterization, antibacterial activity 4877.
- Streptomyces carzinostaticus,**
- neocarzinostatin, purification, characterization, ion-exchange chromatography 4374.
- Streptomyces cattleya,**
- immobilized cells, thienamycin production 5805.
 - northienamycin, 8-epi-thienamycin, structure 1427.
 - thienamycin production, immobilized cells 518.
- Streptomyces cellulosa,**
- endo-1,3- β -D-glucanase, isolation, characterization 2572.
 - proteinase, peptide synthesis 7688.
 - proteinase, purification, proteolysis 7691.
- Streptomyces cinereocrocutus,**
- fermentation, α -santonin hydrogenation, 1,2-dihydro- α -santonin production, stereochemistry 5245.
 - hydrogenation, 2-demethoxydehydro-griseofulvin, stereochemistry 3112.
- Streptomyces cinereus,**
- potato common scab, Solanum tuberosum 6283.
- Streptomyces cinnamomensis,**
- genetic engineering, monensin biosynthesis 6565.
- Streptomyces clavuligerus,**
- aspartate kinase defective mutant, diaminopimelic acid contents, antibiotics biosynthesis 2257.
 - δ -(L-carboxymethylcysteinyl)-L-cysteinyl-D-valine substrates, penicillin analogs enzymatic synthesis 5776.
 - cephalosporin C, chemical modification, 7 α -hydroxycephalosporin C formation 3098.

Streptomyces clavuligerus, (continued)

cephams biosynthesis, regulation, carbon sources, aeration 3097.
 cepher, production, carbon sources, regulation 6522.
 isopenicillin N-epimerase, purification, characterization 1819.
Streptomyces coelicolor,
 antibiotics antibacterial activity, calcium ionophores 2296.
 RNA, DNA, purification methodology 8472.
 x Streptovirgillum mycohyphenum, recombination, antibiotics biosynthesis 7411.

Streptomyces coeruleorubidus,
 auramycinone conversion, biosynthesis, 11-hydroxyauramycinone,
 9-methyl-10-hydroxydaunomycin 955.
 miniaturized production 4377.

Streptomyces collinus
 air spora preservation, liquid culture methodology 3292.
 potato common scab, *Solanum tuberosum* 6283

Streptomyces corchoruili,
 biosynthesis siomycin 3128.

Streptomyces cremus subsp. tobramycin,
 tobramycin biosynthesis, media nutrients 2313.
 tobramycin production, culture conditions 4064.

Streptomyces cyaneofuscatus,
 stimulants, anthracycline biosynthesis, differentiation 116.

Streptomyces diastatochromogenes,
 L-arabinofuranose, substrate specificity, kinetics 4295.

Streptomyces dimorphogenes,
 antibiotic Ro 09-0766, antibiotic Ro 09-0767, antibiotic Ro 09-0768, structure 5794.

Streptomyces dimorphogenes sp. nov.,
 trestatin isolation, α -amylase inhibitors 1445.
 trestatin, structure, spectroscopy 1447.

Streptomyces echinatus,
 echinomycin biosynthesis, phosphate, amino acids effects on 520.
 echinomycin biosynthesis, protoplasts 8369.
 echinomycin derivatives biosynthesis, quinoxaline-carboxylic acid analogs effects on fermentation 5799.

echinomycin derivatives biosynthesis, structure 8370.
 erythromycin, trestatin conversion, echinomycin production 3133.

Streptomyces erythraeus,
 erythromycin production, fermentation, lipids monitoring, optimization 6546.

Streptomyces erythraeus,
 erythromycin, biosynthesis, role, methylmalonyl-CoA mutase, purification, characterization 2617.
 mutants, erythromycin derivatives biosynthesis 1402.
 trypsin, histidine residues, role active sites 1757.

erythromycin biosynthesis, incorporation, carbon, oxygen 7452.

erythromycin A, erythromycin B, high-performance liquid chromatography, fermentation 3111.

Streptomyces flavogriseus,
 cellulase, characterization, biotechnology 5192.
 cyanocycline A derivatives, antitumor activity, antimicrobial activity 2640.
 production, xylase isomerase, endo-1,3- β -D-xylanase, hemicelluloses
 hydrolysis, sodium hydroxide, bagasse, Lolium 5186.

Streptomyces flocculus,
 streptomycin biosynthesis, intermediates, mechanisms 5795.

Streptomyces fraidiae,
 glucose isomerase production, temperature, U.V. radiation, mycomycin C,
 acriflavin, effects on 8598.

neomycin biosynthesis pathways 4051.
 tylosin, biosynthesis, amino acids, carbon sources 3162.

tylosin biosynthesis, ammonium inhibition 3138.
 tylosin, biosynthesis pathway, tylocatone intermediates 6574.
 tylosin, structure activity relationships, antibacterial activity, ribosomes
 binding 3172.

Streptomyces fulvoviridis,
 carbon sources, biosynthesis, taxonomy relationship 2302.

Streptomyces galbus,
 antibiotics biosynthesis, nutrient requirements, optimization 4875.
 antibiotics, purification, characterization, antibacterial activity, antifungal
 activity 4881.

Streptomyces galliseus,
 actacinomycin B conversion, actacinomycin A biosynthesis, 953.

Streptomyces gilvotoneus,
 glyocann derivatives biosynthesis 954.

Streptomyces glaucus,
 trypsin like enzymes, light sensitization, use electronic equipment 66.

Streptomyces globisporus,
 succinylated desmethyl desuccinylase, purification, characterization 5137.

Streptomyces graniticolor,
 air spora preservation, liquid culture methodology 3292.
 β -D-glucosidase enhancement, role, methyl- β -D-glucoside, cellobiose 4345.
 RNA polymerase purification 4327.

Streptomyces griseoflavus,
 biosynthesis, streptoviridins, N.M.R., structure 533.

Streptomyces griseocinereus,
 antibiotic AN-7 production, isolation, characterization 4061.

Streptomyces griseoviridis,
 proline hydroxylation, reaction solutions, pH, temperature 5109.

Streptomyces griseus,
 antagonism, biological control, Dutch elm disease, inoculation, *Ulmus americana*
 289.

anthracycline antibiotics biosynthesis, differentiation, induces intracellular
 levels 6068.

antibiotic resistance, streptomycin production 1310.
 bathomycin biosynthesis, isolation, structure, antibacterial activity,
 antifungal activity 4873.

cephamycins, biosynthesis, antibacterial activity 6518.
 cephamycins, biosynthesis, media (culture), composition, effects on 6517.

A-factor, intracellular levels, effects on streptomycin biosynthesis, energy
 charge, sporulation 4846.

interaction, *Alternaria solani* leaf blight, *Capsicum annuum* 2007.
 lysis, *Candida pseudotropicalis*, *Geotrichum candidum*, single-cell protein
 production 6815.

macrolide antibiotics biosynthesis, intermediates, nonactin, homononactin acid

Streptomyces griseus, (continued)

6575.
 potato common scab, *Solanum tuberosum* 6283.
 proteinase, measuring technique, feeds proteins levels 6047.
 serine proteinase proteinase inhibitor complex, X-ray crystallography 20.
 streptomycin production, industrial applications 9171.
 streptomycin production, peptidoglycans precursors bioaccumulation 4847.
 streptomycin production, trehalose bioaccumulation 4848.
 streptomycin, production, tunicamycin, inhibition, cell walls, biosynthesis,
 effects on 2273.

Streptomyces griseus subsp. cryophilus,
 mutants, penicillin N, carbapenems, biosynthesis pathway 4837.

Streptomyces griseus subsp. sulphureus,
 bathomycin structure 8372.

Streptomyces halstedii,
 leucanicidin, structure 9217.

Streptomyces halstedii subsp. deltae,
 carbomycin A conversion, deltamycin A production, structure 5786.

Streptomyces hydrogenans,
 20 β -hydroxysteroid dehydrogenase, crystallography, X-ray diffracton 6834.

Streptomyces hygroscopicus,
 biaphos, bioassays use 5305.

L form, macrolide antibiotics biosynthesis 4799.
 turimycin biosynthesis, respiration uncouplers 4872.

Streptomyces hygroscopicus subsp. crystallogenes,
 biosynthesis, neocapimycin A, isolation, characterization, antibacterial
 activity, antifungal activity 4871.

Streptomyces hygrospinosus,
 antibiotics + copper sulfate, disease control, canker, downy mildew, powdery mildew
 8139.

Streptomyces ipomoea,
 disease resistance, *Ipomoea batatas*, screening projects 4583.

Streptomyces iwerlini,
 peptide antibiotics complexes, echinomycin + triostin A 4058.

Streptomyces lactamdurans,
 cephamycins biosynthesis, antibacterial activity 6518.
 cephamycins, biosynthesis, media (culture), composition, effects on 6517.

detective mutant, cephamycin C, biosynthesis, characterization 8380.

Streptomyces lavendulae,
 cholesterol oxidase ion-exchange chromatography 4307.

Streptomyces levoris,
 levorn biosynthesis, association, *Candida tropicalis* stimulants activity 2318.

Streptomyces lincolniensis,
 incomycin production, disc-diffusion test 7445.

Streptomyces longisporiflavus,
 potato common scab, *Solanum tuberosum* 6283.

Streptomyces lydicus,
 chandramycin, production, purification, characterization, antibacterial activity
 9202.

streptolydigin biosynthesis 1420.

Streptomyces macromyceticus,
 automycin, macromycin structure, X-ray diffraction 6558.

Streptomyces maghwi sp. nov.,
 taxonomy, roflamycin biosynthesis 2314.

Streptomyces nodosus,
 antiphototoxic B bioassays, spectrophotometry 4857.

Streptomyces noljriensis,
 antibiotic AN-201, production, isolation, structure, antibacterial activity 3134.

Streptomyces noursei,
 nourseimycin, isolation, antimicrobial activity 2307.

streptothricin biosynthesis, relationship arsenic acid resistant mutant 6572.
 streptothricin biosynthesis, relationship phosphate inhibition, arsenic acid
 resistance 7470.

Streptomyces olivaceus,
 olivanic acids, structures 6579.

Streptomyces olivocinereus,
 xylase isomerase immobilization methodology 5170.

radiation polymerization, immobilization, glucose isomerase activity 5178.
 xylase isomerase, immobilized enzymes, kinetics 70.

immobilized cells, comparison, glucose isomerase, immobilized enzymes, D-glucose,
 isomerization, bioreactors, characterization 7746.

radiation polymerization, immobilization, glucose isomerase activity 5178.
 xylase isomerase, immobilized enzymes, kinetics 70.

Streptomyces pilatus,
 + Alcaligenes mixed culture, nitrofurantoin biosynthesis, isolation, antifungal
 activity 2297.

Streptomyces prunicolor,
 antibiotic FR-90109, biosynthesis, mass spectroscopy, antibacterial activity,
 gram-negative bacteria 1435.

Streptomyces pulveraceus subsp. fostreus,
 antitumor antibiotics, isolation, structure, characterization 2639.

antitumor antibiotics production 2638.

Streptomyces ravidus,
 ravidomycin, antibacterial activity, macromolecules biosynthesis, *Bacillus*
 subtilis 4864.

Streptomyces rufinus,
 anthramycin biosynthesis pathway, models, reviews 4375.

Streptomyces ribosidificus,
 mutants, ribosamycin, production 3163.

Streptomyces rimosus,
 oxytetracycline, production, continuous culture 4056.

ultrastructure, proteinase, extracellular enzymes, production 6882.

Streptomyces rochei,
 streptothricin biosynthesis, lysine role 3131.

Streptomyces roseofolius,
 immobilized cells, xylase isomerase activity 71.

Streptomyces rutgersensis,
 lysozyme characterization 6006.

lysozyme production, cultural characteristics 941.
 lysozyme, purification, characterization, C.D. 3458.

serine proteinase, phenylmethylsulfonyl fluoride dyfios inhibition 2584.

Streptomyces scabies,
 antimicrobial activity, nematodes 1325.

Streptomyces setonii,
 protoplast fusion, enhancement, biodegradation, lignin 2702.

Streptomyces showardensis,
terferol, inhibitors, structure, 3'-5'-cyclic-nucleotide phosphodiesterase 3585.
terferol production, 3'-5'-cyclic-nucleotide phosphodiesterase inhibitors 3567.

Streptomyces sioyensis subsp.tanegashimaensis,
antibiotic FR-900336, isolation, characterization 6566.

Streptomyces spheroides,
novobioicin, proteinase, biosynthesis ratio 6573.
U.V. radiation induced mutants, biosynthesis, extracellular proteinase, fibrinolysis role 8583.

Streptomyces sumanensis,
gostatin, isolation, characterization, aspartate aminotransferase inhibition 1724.

Streptomyces tandemae,
mutants, nikkomycin biosynthesis 4065.
nikkomycin peptide synthesis, N-terminus, use amino acids synthesis 8377.

Streptomyces tubercidicus,
tubercidin, high-pressure liquid chromatography 4378.

Streptomyces variegatus sp.nov.,
biosynthesis, α -hydroxyketopentanes antibiotics, antibacterial activity, antifungal activity 2309.

Streptomyces venezuelae,
chloramphenicol biosynthesis, nitrate, ammonium effects on 8355.
chloramphenicol biosynthesis, nitrogen sources metabolism regulation 4854.
chlorobiphenol production, methyl α -glucoside effects on 4053.

Streptomyces violaceans,
L-glutamate oxidase, biochemical characteristics 3483.

Streptomyces violochromogenes,
arugomycin, biosynthesis, antitumor activity 960.

Streptomyces violoceraeus,
chitinase, proteinase, extracellular enzymes, production 6682.

Streptomyces virginiae,
deciliorubin, structure 7459.
virginiamycin biosynthesis 1423.

Streptomyces viridoflavus,
candidon, structure 2303.

Streptomyces viridosporus,
protoplast fusion, enhancement, biodegradation, lignin 2702.

Streptomycetes,
lignin biodegradation, reviews 7829.

Streptomycin,
antibiotic resistance, animal isolates, mastitis, Streptococcus agalactiae, Streptococcus aureus, Streptococcus 9083.
antibiotic resistance, mutants selection, dairy starters, Streptococcus 2730.
antibiotic resistance, R factors transfer, Streptococcus aureus 9044.
antibiotic resistance, Streptococcus aureus, relationship protein A biosynthesis 9054.
antibiotic resistance, Streptococcus faecalis, clinical isolates, association, ribosomes 4697.
antibiotic resistance, transposon Tn5, mediator, Escherichia coli, Rhizobium meliloti 7336.
antibiotic sensitivity testing, dilution tests, Mycoplasma, animal isolates, chickens 3087.
antibiotic sensitivity testing, Mycobacterium tuberculosis, radiometry 3051.
+, antibiotic synergism, antibacterial activity, Pseudomonas aeruginosa [3342].
antibiotic synergism, N-formimidoyl thienamycin, antibacterial activity, Streptococcus faecalis, Streptococcus faecium 4811.
antibiotic synergism, penicillin, Streptococcus antibiotic resistance 444.
antifungal activity, in vitro, Pycnarhiza oryzae, disease control, blast, Oryza sativa 7215.
antifungal activity, Phytophthora infestans, cations effect on 7379.
biosynthesis, Streptomyces griseusA-factor effects on 4846.
containing liposomes, phagocytosis, antibacterial activity, Escherichia coli infected macrophages 13.
disease control, crown gall, Malus pumila 343.
disease control, crown gall, rootstocks, Malus pumila 342.
drug resistance 4721.
drug resistance, Mycobacterium tuberculosis, clinical isolates, USA, Texas 6422.
drug sensitivity testing, drug resistance, Mycobacterium tuberculosis 4717.
drug sensitivity testing, drug resistance, Mycobacterium tuberculosis 6443.
effects on Bacillus subtilis, sporulation, stringent response 2242.
effects on Phytophthora infestans developmental stages 1401.
+erythromycin-benomyl, seed treatments, stimulation, Bradyrhizobium japonicum, rhizosphere colonization, Glycine max 9017.
intracellular killing, Escherichia coli 4849.
production, antibiotic resistance, Streptomyces griseus 1310.
production, industrial applications, Streptomyces griseus 9171.
production, peptidoglycans precursors bioaccumulation, Streptomyces griseus 4847.
production, trehalose bioaccumulation, Streptomyces griseus 4848.
production, tunicamycin, inhibition, cell walls, biosynthesis, effects on, Streptomyces griseus 2273.
resistance genes, hybridization analysis, transposons, gene expression, Escherichia coli, Rhizobium meliloti 442.
resistance, induction, Vibrio cholerae, furazolidone mutation 3993.
stimulation, IMP biosynthesis, Brevibacterium ammoniagenes 115.
stimulation, IMP biosynthesis, Brevibacterium ammoniagenes 952.
uptake, cytochrome c oxidase effects on, Bacillus subtilis 9196.
uptake, Rhizobium, association, antibiotic resistance 5713.

Streptomycin sulfate,
stability, biological properties, additives effects on 7443.

Streptonigrin,
biosynthesis, Streptomyces flocculus, intermediates, mechanisms 5795.

Streptosporangium albidum,
aculexmycin, biosynthesis, taxonomy 2292.
fermentation, aculexmycin isolation, antibacterial activity, antifungal activity, larvicides, Culicidae 2293.

Streptothricin,
biosynthesis, arginine radioactive labelling, N.M.R., Streptomyces 6569.
biosynthesis, lysine role, Streptomyces rochei 3131.
biosynthesis, relationship arsenic acid resistant mutant, Streptomyces noursei 6572.
biosynthesis, relationship energy metabolism, arsenic acid resistance, phosphate inhibition, Streptomyces noursei 7470.

Streptothricin F,
biosynthesis, Streptomyces, β -lysine, formation 4844.

Streptoveriticillium,
production, β -lactamase inhibitors, screening 3082.

Streptoveriticillium mycohypticum,
phospholipase C inhibitor, purification, characterization 7672.
x Streptomyces coelicolor, recombination, antibiotics biosynthesis 7411.

Streptoveriticillium olivoreticuli,
olivoretin A, olivoretin D, structure, X-ray absorption spectroscopy 7478.

Streptoveriticillium olivoreticuli subsp.neonacticus,
isolation, neo-enactins, high-pressure liquid chromatography, physicochemical properties, biological properties 2288.

Streptoveriticillium rimofaciens,
biosynthesis, midiomycin D, structure, antifungal activity 8373.

Streptoviridin,
high-performance liquid chromatography 1425.

association, tunicamycins, conyneroxins, biological activity, structure 523.
N.M.R., structure, Streptomyces griseoflavus, biosynthesis 533.

Stringent response,
Bacillus subtilis, sporulation, antibiotics effects on 2242.

Stripe,
Cephalosporium gramineum, planting dates effects on, yield, USA, Kansas, Triticum aestivum 7974.

Stripe rust,
disease resistance, inheritance, growth stage, vegetative cells, Triticum hybrids 2886.
Puccinia striiformis, disease control, seed treatments, fungicides, triticum aestivum 2904.
Puccinia striiformis disease resistance, gene transfer, plant breeding, Triticum dicoccoides x Triticum durum, Triticum aestivum 3860.
Puccinia striiformis, disease resistance, genes, chromosomes location, Triticum aestivum 2834.
Puccinia striiformis, disease resistance, inheritance, plant breeding, Triticum 5476.
Puccinia striiformis, Triticum aestivum seedlings, linkage analysis 258.
Puccinia striiformis, Triticum aestivum, USA, Pacific Northwest, models 252.

Stropharia aeruginosa,
soil, mycelia growth, development 401.

Stropharia rugoso-annulata,
cultivation, soil 6995.

Structural proteins,
African swine fever virus, purification, use enzyme-linked immunosorbent assay 1547.
analysis, influenza virus, parainfluenza virus, erythrocytes adsorption 5887.
characterization, calcivirus identification 1735.
cytoplasmic polyhedrosis virus, purification, characterization, isolates, Heliothis amigeri 3422.

Stunt,
Cynadon dactylon, Clavibacter gen.nov. isolates, characterization 6240.
Gypsophila paniculata, mycoplasma-like organisms 3847.
pathogenesis, morphology, Humulus lupulus 8045.
Spiroplasma, growth, media methodology 3266.
Spiroplasma, transmission, Euscelidius variegatus vectors, Sinapis alba, Pisum sativum, Raphanus sativus, Spinacia oleracea 8030.
Spiroplasma, vectors host range, Dalbulus longulus 7960.

Stylosanthes capitata,
anthracnose, Colletotrichum gloeosporioides, pathology 7932.

Sub-alpine environments,
Abies balsamea, soil nitrification, methanol extracts inhibition, proteins binding effects on 2909.
Abies balsamea soil, nitrification, phenols inhibition 2908.

Sub-polar environments,
litter, biodegradation, winter, Picea mariana, Betula glandulosa, Cladonia stellaris 3907.
reservoirs, biodegradation, wood, aquatic microorganisms 7838.

Subacute sclerosing panencephalitis virus,
immunoglobulin G, identification, staining, immunoelectrofocusing, methodology 638.

Subbaromyces splendens,
role, percolation filters, sewage treatment 1460.

Suberin,
characterization, defense mechanism, Quercus robur, disease resistance, Stereum gausapatum 7235.
esterase depolymerization, Fusarium solani f.sp.pisi infection, tubers, Solanum tuberosum 8852.

Substrate specificity,
bacteria, mixed culture 1598.
dye-linked alcohol dehydrogenase, Rhodospseudomonas acidophila 1776.

Substrates,
fructose, Zymomonas mobilis, ethanol production, factors affecting, kinetics 148.
haloaromatics, industrial wastes, biodegradation 3207.
polymers, β -penicillin amidase, use, Escherichia coli immobilization 778.

Subterranean clover red leaf virus,
disease spread, Vicia faba, epidemiology, vectors, Aphididae 5405.
disease transmission, Aulacothrum circumflexum vectors 4503.
hybridization analysis, detection, plants, Aulacothrum solani, methodology 4151.
purification, cellulase use 8460.

Subtilin,
Bacillus subtilis, biosynthesis 1419.

Subtilisin,
active sites serine residues, tryptophan residues distance, fluorescence, bacteria 899.
immobilization, aluminum oxide, Bacillus subtilis 7734.

Subtilisin inhibitor,
renaturation, denaturation kinetics, fluorescence, Streptomyces 901.

Subtropical zones,
Azospirillum rhizosphere, Gramineae, Mexico 4634.

Succession,
ectomycorrhizas inoculation, seedlings, roots colonization, spatial distribution, soil, Betula 5556.
ectomycorrhizas, spreading, spatial distribution, fruit bodies, Betula pubescens 5557.
rain forests, nitrogen cycle, Costa Rica 4612.

Succinic acid,
fumaric acid, conversion, Campylobacter, Clostridium, Streptococcus, detection, gas chromatography, methodology 794.

- Succinivibrio dextrinosolvens**, growth, fermentation, chelation, effects on 2315.
- Succinyl-CoA synthetase (ADP-forming)**, 5'-p-fluorosulfonylbenzoyl adenosine chemical modification, association ATP, ADP binding sites, *Escherichia coli* 1758.
- Succinyl-diaminopimelate desuccinylase**, *Streptomyces globosporus*, purification, characterization 5137.
- Sucrose**, conversion, mixed culture, methanogenic bacteria, bacteria, methanogenesis, immobilized cells 2182.
- dietary intake, effects on dental plaque removal, man 4969.
- effects on dehydration resistance, *Saccharomyces cerevisiae* 1047.
- fermentation, ethanol production, monitoring, computer applications, immobilized cells, *Saccharomyces cerevisiae* 6143.
- fermentation, sensors 3530.
- fermentation, *Streptococcus lactis* plasmid pSN conjugation, nisin biosynthesis 3146.
- fermentation, *Zymomonas*, ethanol production, reactors 153.
- hydrolysis, β -D-fructofuranosidase, kinetics, pH, temperature effects on, soil 6332.
- hydrolysis, viscosity effects on, β -D-fructofuranosidase, *Saccharomyces cerevisiae* 8535.
- leaves, content, *Phaseolus vulgaris*, relationship, disease resistance, tobacco mosaic virus infection 8866.
- production, industries, hydrolysis, starch, dextran, α -amylase, dextranase, bacteria 53.
- +whey liquid culture, production, use, *Leuconostoc mesenteroides* 8474.
- Sugar**, carbon sources, effects on growth rate, auxanotetracycline oxygenase, aureomycin production, *Streptomyces aureofaciens* 4860.
- fermentation, lignocelluloses hydrolysis, cellulase, reviews, microorganisms 2599.
- lipids production, *Tolyposporium ehrenbergii*, *Sphaelotheca rolliana* 5250.
- Sugar beets**, fermentation, single-cell protein production, *Trichoderma album* 1716.
- Sugars**, assays, 2,4-dinitrosalicylic acid, lignocelluloses hydrolysis 8680.
- bagasse hydrolysates, use carbon sources, fermentation 8577.
- fermentation, ethanol, cellulose hydrolysis, cellulolytic enzymes, cost-benefit analysis, *Trichoderma reesei* 5299.
- fermentation, ethanol production, amylolytic enzymes pretreatment, starch, *Zymomonas mobilis* 8663.
- fermentation, ethanol production, cost-benefit analysis, tubers, *Beta vulgaris* 8655.
- fermentation, ethanol production, immobilized cells, *Saccharomyces cerevisiae* 6130.
- fermentation, ethanol production, Maillard reaction, *Saccharomyces cerevisiae* 8662.
- fermentation, ethanol production, wood hydrolysis, enzymes, acids 7814.
- fermentation, lactic acid bacteria identification methodology 4198.
- fermentation, lactic acid, *Lactobacillus cellobiosus*, beans, juices, *Glycine max* 5316.
- fermentation, *Streptococcus lactis*, hydrogen peroxide bioaccumulation 2686.
- gas chromatography, flour fermentation, fermented food, Uji, lactic acid bacteria 3692.
- production, lignocelluloses hydrolysis, cellulase, kinetics, models 3474.
- production, bagasse hydrolysis, *Trichoderma reesei* cellulase 1808.
- production, lignocelluloses biodegradation, *Termitomyces clypeatus* 3527.
- Sullius**, isolation, pure culture, methodology, nutrient requirements, reviews 829.
- sporulation, organic acids production, agar, association, autoclaves, effects on 5834.
- Sullius bovinus**, ectomycorrhizas, mycelia, spreading, colonization, nutrient transport, roots, *Pinus sylvestris* 5573.
- Sullius granulatus**, ectomycorrhizas, effects on translocation, carbon sources, nitrogen sources, photosynthesis, *Pinus taeda* 5572.
- ectomycorrhizas formation, Coniferales seedlings, high-altitude environments, mines 5547.
- ectomycorrhizas, inhibition, mancozeb, paraquat, non-target organisms, seedlings, *Pinus sylvestris* 5570.
- effects on growth, photosynthesis, *Pinus contorta* 5538.
- trees inoculum production methodology, reviews 830.
- Sullius luteus**, ectomycorrhizas, fruit bodies formation, environmental factors, plantations, *Pinus radiata* 5571.
- Sullius plorans**, inoculation, *Pinus cembra*, methodology, reviews 831.
- Sulbactam**, +ampicillin antibacterial activity, agar diffusion test quality control 4834.
- +ampicillin, antibacterial activity, *Escherichia coli*, *Klebsiella aerogenes* 4843.
- cefuroxime, antibiotic synergism, antibacterial activity, *Bacteroides* 6512.
- clavulanic acid, antibiotic synergism, antibacterial activity, *Acinetobacter calcoaceticus* 4792.
- β -lactamase inhibitors, gram-negative bacteria 9161.
- Sulbenicillin**, β -lactamase hydrolysis, pH role, *Bacillus cereus* 4277.
- Sulfadoxine**, disease control, *Phytophthora parasitica* root rot, *Lycopersicon esculentum* 5532.
- Sulfamethoxazole**, drug resistance, clinical isolates, *Escherichia coli* 4004.
- drug resistance, plasmids, clinical isolates urinary tract, *Escherichia coli* 2204.
- Sulfanilamido-naphthoquinones**, derivatives, synthesis, antitubercular agents, antibacterial activity, *Mycobacterium tuberculosis* 5724.
- Sulfate**, by-products, sulfur production, *Chlorobium thiosulfatophilum* 3977.
- calcium sulfate, conversion sulfur, mixed culture, *Desulfobacter*+*Chlorobium limicola f.sp.thiosulfatophilum* 5693.
- removal, wastewater treatment, digestion (anaerobic) 4899.
- Sulfate reduction**, bacteria, monitoring, radioactive labelling, methodology 3346.
- Sulfate-reducing bacteria**, antibacterial activity, sulfur containing chemical compounds 1322.
- Sulfate-reducing bacteria, (continued)** biocides, antibacterial activity, use, oil and gas industry 1299.
- corrosion, pipes, oil and gas industry, reviews 8411.
- oil and gas industry, bioremediation, equipment, contamination, oil 6665.
- Sulphydryl groups**, inhibitors, p-chloromercuribenzoic acid, effects on hemicellulase, hydrolysis, hemicellulose, *Cephalosporium sacchari* 4354.
- Sulfide**, industrial effluents, toxicity, methanogenic bacteria, digestion (anaerobic) 1483.
- minerals, oxidation, thermophilic bacteria, acidophilic bacteria 416.
- Sulfite**, media (culture), *Candida utilis* 5935.
- Sulfite liquor**, fermentation, *Candida* 6169.
- fermentation, single-cell protein production, *Candida utilis* 7671.
- fermentation, single-cell protein production, monitoring, computer applications, *Candida utilis* 5966.
- fermentation, single-cell protein production, *Pekilo process*, monitoring, computer applications, *Paeclomyces varioti* 5968.
- fermentation, single-cell protein production, *Pichia labacensis* sp.nov. 6816.
- Pekilo process*, single-cell protein production, biomass measurements, *Paeclomyces varioti* 5965.
- Sulfobacillus thermosulfidooxidans**, copper leaching, industrial wastes 7301.
- Sulfolobus acidocaldarius**, dibenzothiopeptide oxidation 8675.
- Sulfonamide**, treatment, urinary tract infection, bacteria, man 2212.
- Sulfonamides**, drug resistance, clinical isolates, *Haemophilus influenzae*, *Haemophilus parainfluenzae* 3035.
- drug sensitivity testing, *Mycobacterium fortuitum* 4719.
- Mycobacterium* sensitivity 3045.
- Sulfonic acid**, derivatives, antibacterial activity 4748.
- Sulfur**, analogs, synthesis, penicillin, *Cephalosporium acremonium* 8353.
- application, disease control, powdery mildew, *Vitis vinifera* 340.
- biogeochemistry, microorganisms, reviews 8206.
- coatings, urea fertilizers, savannahs soil, pH, nitrogen levels 8256.
- coatings, urea granules, fertilizers (slow release), nitrification 8231.
- compounds, arsenic, removal, mixed culture, *Thiobacillus thiooxidans*, *Thiobacillus ferrooxidans* 8261.
- compounds, petroleum, biodegradation, *Desulfovibrio* 8274.
- containing amino acids, L-methionine γ -lyase synthesis, *Pseudomonas putida* 65.
- containing, chemical compounds, antibacterial activity, sulfate-reducing bacteria 1322.
- containing simulated beef flavor compounds volatiles, chemical composition, *Saccharomyces cerevisiae* 1046.
- conversion, calcium sulfate sulfate, mixed culture, *Desulfobacter*+*Chlorobium limicola f.sp.thiosulfatophilum* 5693.
- cycles, heterotrophic bacteria, soil 8984.
- iron molybdenum complex, nitrogen binding, models, nitrogenase 2605.
- leaching, coal, *Thiobacillus* 3976.
- leaching, coal, *Thiobacillus ferrooxidans* 3974.
- mineralization, soil microorganisms, forests 1230.
- nutrient cycles, soil microorganisms, forests 4611.
- organic compounds formation, soil microorganisms, forests soils 5617.
- oatmeal, soil microorganisms, acidity, sand, soil, dunes, coastal environments 8968.
- production, sulfate by-products, *Chlorobium thiosulfatophilum* 3977.
- removal, coal, mathematical models, *Thiobacillus ferrooxidans* 5694.
- Thiobacillus ferrooxidans* bioaccumulation, localization 2181.
- Sulfur dioxide**, effects on, *Bradyrhizobium japonicum*, association, *Glycine max*, growth 8992.
- effects on *Byssoschlamys nivea*, biomass, patulin biosynthesis 6207.
- pollution effects, soil microorganisms, forest floor 5613.
- Sunlight**, inactivation *Bacillus thuringiensis* spores, protection, biological control 119.
- inactivation, *Escherichia coli*, pages 2402.
- Sunn-hemp mosaic virus**, disease resistance, *Vigna unguiculata*, nutrition effects on 312.
- Sunn-hemp mosaic virus**, antiviral activity, *Chenopodium ambrosioides* plant extracts, foliar applications, disease control 8140.
- +*Fusarium oxysporum* mixed infection, effects on *Vigna unguiculata* growth 5407.
- mixed infection, *Fusarium oxysporum*, pathogenesis, *Vigna unguiculata* seedlings, nutrition effects on 6234.
- mixed infection, *Fusarium oxysporum*, plant diseases, *Vigna unguiculata*, pathogenesis, scanning electron microscopy 6236.
- Supercooling**, methodology, microorganisms 9268.
- Superoxide**, free radicals, caffeic acid, inhibition, *Pyrularia oryzae*, spore germination, role disease resistance, plant diseases 8889.
- free radicals, non-steroidal antiinflammatory drugs, inactivation, page T2 4769.
- production, cercosporin, photoinduction 7901.
- role tyrosine hydroxylation, monophenol monooxygenase, *Basidiomycetes* 2594.
- Superoxide dismutase**, *Bacillus megaterium*, spores, radioactivity, oxygen levels effects on 4743.
- Suppressor mutant**, inulinase, fructose production, *Pichia polymorpha* 3526.
- Surface activity**, surfactants production, hydrocarbons metabolism, *Acinetobacter calcoaceticus* 8629.
- Surface properties**, matrix, bioactors, methanogenic bacteria 421.
- Surface water**, bacteria, fertilization effects on, forests 2106.
- enterovirus, concentration, water quality, effects on 5853.
- pollution detection, microbial pollution, fecal coliforms, enumeration, pour-plate method 2397.

Surface water, (continued)

removal, enterovirus, water treatment, Netherlands 4953.
rivers, water quality, viruses 9254.
viruses levels, detection methodology, viruses 2384.
water isolates, Salmonella, R factors transfer, antibiotic resistance 9046.

Surfaces,

bacteria films removal, glycol-bis(β -aminoethyl ether)-N, N-tetraacetic acid effects on 417.
types, disinfectants antibacterial activity, *Pseudomonas aeruginosa* 5862.

Surfactants,

activity, *Arthrobacter glycolipids* 7777.
alkyl sulfonates, biodegradation, wastewater treatment, *Pseudomonas rathionis* 6952.

amphoteric, disinfection 1515.

anionic, disinfection 1514.

biodegradation, alcohol dehydrogenase, arylsulphatase 189.

biosynthesis, metabolic pathways, microorganisms, reviews 7776.

effects on antisepsis antibacterial activity 9261.

glycolipids, production, *Torulopsis bombicola* 1846.

5-*is*-inosinic acid biosynthesis, *Brevibacterium ammoniagenes* 6062.

lipids, production, continuous culture, *Pseudomonas aeruginosa* 6922.

production, surface activity, hydrocarbons metabolism, *Acinetobacter calcoaceticus* 8629.

quaternary ammonium compounds, biodegradation, freshwater microorganisms 5311.

surfaces interaction microorganisms 4392.

Tween, stimulation IMP production, *Brevibacterium ammoniagenes* 4371.

urea, nitroreum recovery, production, *Bacillus licheniformis* 5265.

Surgery,

antisepsis, disease control, environmental hygiene, hospitals 1518.

heart, postoperative infection, gram-negative bacteria isolation, antibiotic sensitivity testing, aminoglycoside antibiotics 3107.

maxilla, oral hygiene effects on, dental plaque, gingivitis, man 6726.

Suspected matter,

association, enterovirus, microbial pollution, lakes 9255.

biological control efficacy, *Bacillus thuringiensis* var. *israelensis*, *Aedes aegypti*, *Culex pipiens* 8642.

biomass, assays, carbon (activated) sewage sludges waste treatment 2379.

SV40,

antigen T, DNA binding sites, immunoassays, monoclonal antibodies 589.

DNA, transfection, Vero cells, methodology 5000.

Swabs,

detection, gastrointestinal tract *Campylobacter fetus* subsp. *jejuni*, comparison feces 736.

isolation, *Salmonella typhi*, sewage effluents 6717.

media (transport), isolation, *Chlamydia trachomatis*, diagnosis, sexually-transmitted diseases, man 5037.

Streptococcus detection, latex agglutination, clinical isolates 5048.

swabs, slides, Streptococcus identification, clinical microbiology 717.

Swainsonine

Rhizoctonia leguminicola, contamination, hay, Trifolium pratense, mycotoxicosis, horses 8728.

Sweden,

ethylene production, ascomycetes forests, *Elaphomyces* 351.

gonorrhea epidemiology, man, *Neisseria gonorrhoeae* auxotyping, serotyping, antibiotic sensitivity testing 482.

Gramineae, rhizosphere, nitrogen-fixing bacteria isolates, nitrogenase activity 9014.

Medicago sativa, nitrogen fixation measurements, field trials 9011.

Sweet clover necrotic mosaic virus,

new records, characterization, *Melilotus officinalis* isolates 4523.

Sweeteners,

microorganisms biosynthesis, books 2541.

production, glucose isomerization, immobilized enzymes, microorganisms, starch, Zea mays 5188.

Swimming pools,

bacteria, contamination, association hay microflora 2405.

chlorination, association, bacteria, lewes, Australia 3220.

chlorination, indicator species, *Pseudomonas aeruginosa*, *Streptococcus* 567.

disinfection 1500.

disinfection, sodium hypochlorite, books 838.

enterovirus microbial pollution, comparison, bacteria indicator species, Romania 2409.

enumeration, *Staphylococcus aureus*, media (culture), methodology 1822.

flours, *Sporothrix schenckii* isolation 580.

Switzerland,

dry rot, *Serpula lacrymans*, biodegradation, wood 1247.

forest products, preservation, biodegradation, fungi 1249.

solid waste, composts, fertilizer applications, soil amendment 8392.

Symbionts,

bacteria, actinomycetes, Basidiomycetes, Zygomycetes, ectomycorrhizas, leaves, *Tozzia alpina* 8204.

ectomycorrhizas, *Pinus banksiana*, Canada 8165.

nodulation, *Macrozamia communis* seedlings 2907.

Symbiosis,

actinorrhizas, plants, nitrogen fixation 9009.

activity, crop residues biodegradation, *Bacillus polymyxa*, *Penicillium* 3673.

artificial, L form bacteria, plants 6345.

Bradyrhizobium japonicum, nodules, Glycine max, α -D-galactosidase, α -D-glucosidase 6363.

Ceratobasidium conigerum, glucose uptake, *Goodyera repens*, *Dactylorhiza purpurella* 5645.

ectomycorrhizas, plants roots, measuring techniques, reviews 832.

Fagus sylvatica mycorrhizas, development, ultrastructure 2104.

Frankia, nitrogen fixation, *Alnus nepalensis*, seasonal variations 6320.

sinensis, lutea vesicular-arbuscular mycorrhizas, detection 2131.

Glomus, *Agropyron smithii*, effects on water relations 6342.

Glomus etunicatus, *Citrus macrophylla*, effects on viruses plant diseases pathogenesis 4635.

Glomus fasciculatus, enhancement, growth, Glycine max 2135.

Glomus intraradices, seedlings, *Citrus aurantium*, *Poncirus trifoliata* \times *Citrus sinensis*, association, photosynthates distribution 8219.

Glomus macrocarpum, soil aeration, carbon dioxide effects on, *Eupatorium odoratum*, *Guzotia abyssinica*, *Sorghum bicolor* 3937.

Glomus mosseae, growth models, roots, *Allium porrum* 3934.

Symbiosis, (continued)

Hippophae rhamnoides + *Glomus fasciculatus* 2927.

infectivity, *Rhizobium*, preservation, methodology 5899.

interaction, *Rhizobium*, *Cicer arietinum* 4648.

Medicago sativa, *Rhizobium meliloti* nitrogen fixation, glycine betaine effects on sodium chloride tolerance 2159.

Medicago sativa, *Rhizobium meliloti* symbiosis, calcium, magnesium effects on 2960.

microorganisms, plants, nitrogen fixation measurements, soil diffusion 411.

mutants, *Rhizobium meliloti*, nitrogen fixation, genetic control, *Medicago* 5676.

mycorrhizas, *Arbutus unedo*, ultrastructure 4622.

mycorrhizas, plants, books 3382.

nitrogen fixation, *Rhizobium japonicum*, relationship, rifampicin resistance mutation 2962.

nitrogen-fixing bacteria, *Medicago sativa*, Glycine max, characterization 1279.

nitrogen-fixing bacteria, rhizosphere microorganisms, *Oryza sativa*, ultrastructure 8236.

Nostoc, *Oryza sativa* nitrogen uptake 3958.

plants, vesicular-arbuscular mycorrhizas, effects on, measuring techniques, reviews 389.

Pseudotsuga menziesii, endomycorrhizas, role, drought tolerance, USA 2913.

reviews, books 845.

Rhizobium + *Glomus mosseae*, effects on, *Acacia holosericea*, *Acacia reddiana*, growth 8969.

Rhizobium, *Cyamopsis tetragonoloba*, phenotypes, variability 8246.

Rhizobium, Leguminosae, equipment, association, nodulation, nitrogen fixation 2955.

Rhizobium, Leguminosae, nitrogen fixation 9005.

Rhizobium meliloti, association, tricarboxylic acid cycle intermediates utilization 8234.

Rhizobium meliloti, *Medicago sativa*, *Rhizobium leguminosarum*, plasmid pJ1008, effects on 4649.

Rhizobium, nitrogen fixation, genetic analysis, Leguminosae 9006.

Rhizobium, nitrogen fixation, interaction, Leguminosae 9007.

Rhizobium, *Trifolium pratense*, nitrogen fixation, white clover mosaic virus infection 7141.

Trifolium repens, nitrogen fixation, *Rhizobium trifolii* populations 409.

vesicular-arbuscular mycorrhizas, plant cells culture systems, aseptics 2120.

vesicular-arbuscular mycorrhizas, *Trifolium*, competition 3935.

vesicular-arbuscular mycorrhizas, weeds, association, habitat disturbance, USA, Utah 396.

Syncytia,

formation, herpes simplex virus 1, antiviral activity, aliphatic amines 4776.

Syncephalastrum racemosum,

degradation, aromatic compounds, effects on phytotoxicity, allelopathy, growth, *Triticum aestivum* 373.

Syntrophism,

association, *Rhizobium*, nitrogen fixation, enhancement, growth 4661.

Syphilis,

diagnosis, hamagglutination, comparison, fluorescent antibody test, man 3317.

diagnosis, use, toluidine red serum tests, man 2511.

immunodiagnosis, enzyme-linked immunosorbent assay 712.

immunodiagnosis, hemadsorption 2500.

rabbits, immunoglobulin M detection, enzyme-linked immunosorbent assay methodology, *Trypanoma phagedenis* flagella 765.

rapid plasma reagin test screening, man 2453.

Syringe vulgaris,

Phellinus punctatus incidence, USA, North Dakota 3838.

Syringic acid,

metabolism, decay fungi, white rot, brown rot, soft rot, association, lignin, biodegradation 2705.

Syringae,

pharmaceuticals, microorganisms analysis 4136.

Tablets,

gas, generator, use, *Campylobacter* isolation, feces 3318.

Tagetes,

Alternaria tagetica blight, pathogenicity 1140.

Tagetes erecta,

Alternaria tagetica blight, pathogenicity 1140.

Tagetes patula,

Alternaria tagetica blight, pathogenicity 1140.

Talga,

cellulose biodegradation, soil temperature, soil nitrogen levels, soil microorganisms 5544.

nutrient cycles, forest floor, USA, Alaska 5545.

Taints,

production, cork, contamination, growth, Fungi, wine 7796.

Taiwan,

Nicotiana tabacum, plant breeding, cucumber mosaic virus disease resistance 5480.

Take-all,

disease resistance, *Gaeumannomyces graminis* use induction, *Triticum aestivum* 2849.

Gaeumannomyces graminis, manganese deficiency effects on disease resistance, *Triticum aestivum* 8099.

Gaeumannomyces graminis var. *tritici*, biological control, seed treatments, *Pseudomonas fluorescens*, *Triticum aestivum* 336.

Gaeumannomyces graminis var. *tritici*, senescence effects on, *Hordeum vulgare* 7954.

Gaeumannomyces graminis var. *tritici*, survival, soil 6351.

Gaeumannomyces graminis var. *tritici*, tillage, association, pathology, *Triticum aestivum* 7977.

Gaeumannomyces graminis var. *tritici*, *Triticum aestivum*, biological control, *Gaeumannomyces graminis* var. *graminis* + *Phialophora* 5512.

Gaeumannomyces graminis var. *tritici*, virulence, *Triticum aestivum* 1126.

Triticum aestivum, arabea population dynamics, suppression 1173.

Triticum aestivum, epidemiology, soil, growth, *Gaeumannomyces graminis* var. *tritici* 7145.

Triticum aestivum, *Gaeumannomyces graminis* var. *tritici* 7953.

Talaromyces emersonii,

β -D-fructofuranosidase, hydrolysis, polysaccharides, *Beta vulgaris* crop residues 8674.

Talaromyces stipitatus,

talarmycin B isolation, synthesis 5396.

Talaromycin B,

Talaromycin sp. *stipitatus*, isolation, synthesis 5396.

Tallismycin,

analogs, DNA cleavage, structure-activity relationships 529.

Tan spot,

Corynebacterium flaccumfaciens, *Glycine max*, epidemiology, USA, Iowa 248.

Tannic acid,

biodegradation, fungi 3675.

Tanning,

leather, proteolytic enzymes, bacteria, fungi 48.

Tannins,

biodegradation, *Klebsiella pneumoniae*, *Corynebacterium*, gallic acid production, *Caesalpinia spinosa* 5106.

Tanzania,

Vigna unguiculata, *Aspergillus parasiticus* infection, aflatoxins production 3795.

Taphrin deformans,

CGA 64250, effects on, lipid composition 2084.

Tar,

sand combustion wastewater treatment, oil and gas industry, organic compounds, microorganisms oxidation 3194.

Taraxacum officinale,

dandelion yellow mosaic virus, physicochemical properties, transmission (mechanical) 2043.

hosts, tobacco ringspot virus, tomato ringspot virus 3818.

disease reservoirs, tomato ringspot virus, stem pitting, *Prunus persica*, USA,

Pennsylvania 8811.

Tartaric acid,

levels, monitoring, malolactic fermentation, wine 8665.

L-Tartaric acid,

decomposition, *Botrytis cinerea*, musts, organoleptic evaluation, wine 8666.

Tar,

water, quality, odor compounds, volatiles, actinomycetes 2649.

Taxonomic significance,

enterotoxins biosynthesis, *Aeromonas* 3760.

Phomopsis asymptomatic infection, plants 7129.

Taxonomy,

Endogonaceae, *Glomus*, ecological distribution, geographical distribution, Canada

3163.

Flexibacter, antibiotic SQ 28,332, fermentation, structure, antibacterial

activity 1448.

Flexibacter, antibiotic SQ 28,502, antibiotic SQ 28,503, fermentation, biological

properties 1450.

Leptoglyphis chapmanii, biological control, larvae, *Aedes* 8644.

Leptoglyphis balsamiferae sp. nov., etiology, leafspot, *Populus balsamifera*, Canada

3913.

Micromonospora, dapiricin, fermentation, antifungal activity 2286.

morphology, *Drechslera pluriseptata*, isolation, *Eleusine coracana*, seeds 8048.

Mycoiophthora thermophila, cellulose biodegradation 1889.

mycorrhizas, books 643.

Penicillium, classification, association, mycotoxins 1925.

strains pathogenicity, biological control, *Bacillus thuringiensis* 6924.

Streptomyces, antibiotic OM-173, production, antibacterial activity 2289.

Streptomyces fulvoviridis, relationship carbanepenes, biosynthesis 2302.

Streptomyces maghni sp. nov., roflamycin biosynthesis 2314.

Streptoporiangium albidum, auleximycin, biosynthesis 2292.

Taxonomy (numerical),

lactic acid bacteria, meat, vacuum packaging 4446.

TCDD,

biodegradation, *Nocardopsis*, *Bacillus megaterium* 2713.

Time,

powders, + agar, inhibition, bacteria 7369.

Test drape,

antibacterial activity 7543.

iodine, prophylaxis, mastitis, cattle 4959.

Tecteleanthia,

leaves, *Chitocarpa* bark, antibacterial activity, *Bacillus subtilis*, antifungal

activity, *Cladosporium cucumerinum* 4738.

Telcholic acid,

bioassays, use, gram-positive bacteria, detection, soil 8202.

comparison, α -hemolysin, antibodies, measuring techniques, diagnosis,

bacteremia, endocarditis, *Staphylococcus aureus*, man 7620.

Telchomycin,

Actinoplanes leichomyces, aromatic compounds, amino acid composition 9213.

Actinoplanes leichomyces, isolation, physicochemical properties 8384.

antibacterial activity, *Staphylococcus aureus* 7422.

antibacterial activity, *Staphylococcus aureus*, *Staphylococcus epidermidis*,

Streptococcus faecalis 4815.

Telchuronic acid,

primary structure, *Bacillus subtilis* 7659.

Teliospores,

Novossia indica, isolation, infected *Triticum aestivum*, morphology 7984.

sporulation, *Cronartium flaccidum*, environmental factors effects on, infection,

Vincetoxicum officinale 3927.

Temocillin,

antibacterial activity, Enterobacteriaceae, *Haemophilus influenzae*, *Neisseria*

gonorrhoeae 3105.

antibacterial activity, Enterobacteriaceae, *Haemophilus influenzae*, *Haemophilus*

parainfluenzae 5754.

antibiotic synergism, β -lactam antibiotics, antibacterial activity,

Enterobacteriaceae, *Pseudomonas aeruginosa*, *Staphylococcus aureus* 3122.

inhibition, β -lactamase, structure-activity relationships, Enterobacter

cloacae, *Citrobacter freundii* 5120.

Temperate environments,

agroforestry, nitrogen fixation, actinorrhizas, reviews 2915.

Temperature,

Bacillus thuringiensis resistant mutant, use, biological control, insects 6746.

Campylobacter fetus subsp. jejuni isolation, methodology comparison 1650.

cultures, effects on growth, *Saccharomyces cerevisiae* 5084.

Chlamydia trachomatis, + media (culture), effects on storage 5079.

composting, agricultural wastes, industrial wastes, wool 4100.

composting, evaporation, oxygenation, ventilation 4085.

cooling water, effects on glutamic acid uptake, heterotrophic bacteria 1493.

dependence, polymyxin B antibacterial activity, *Escherichia coli* 9198.

dew, association, pathology, *Botryosphaeria vaccinii* latent infection, *Vaccinium*

macrocarpon 8041.

Temperature, (continued)

distribution, fermenters 2674.

dormancy, *Malus domestica*, effects on powdery mildew, *Podosphaera leucotricha*

7985.

effects on β -D-fructofuranosidase, sucrose hydrolysis, kinetics, soil 6332.

effects on activity, pectinolytic enzymes, *Clostridium pectinofermentans* 7737

effects on aflatoxin B₁ levels, manure, chickens 6208.

effects on aflatoxins biosynthesis, rice, cheddar cheese, *Aspergillus flavus*,

Aspergillus parasiticus 3703.

effects on *Ananas comosus* infection, pathogenesis, *Penicillium funiculosum*,

Fusarium moniliforme var. *subglutinans* 883.

effects on, antimicrobial activity, antimicrobial agents 1359.

effects on *Aspergillus ochraceus*, ochratoxin A biosynthesis, biomass, growth

2758.

effects on *Aspergillus parasiticus* aflatoxins biosynthesis, in vitro 7067.

effects on attenuation, use live vaccines, cell culture, rubella virus 7485.

effects on bactericidal activity, gram-positive bacteria, gram-negative bacteria,

albumen, eggs, chickens 4010.

effects on biodegradation, 2,4-D, soil microorganisms 4433.

effects on Byssochlamys nivea, biomass, patulin biosynthesis 6207.

effects on chlorine disinfection, parvovirus 6484.

effects on, *Clostridium perfringens*, *Staphylococcus aureus*, growth, beef 7029.

effects on, dairy starters, proteolysis, cheese 1907.

effects on dehydrogenase activity, soil 8988.

effects on dissolved oxygen levels, culture, *Bacillus stearothermophilus* 9296.

effects on, ectomycorrhizas, *Salix rotundifolia*, tundra 2103.

effects on endoparasiticide activity, *Bacillus sphaericus* 5129.

effects on ethylene biosynthesis, hypersensitive response, tobacco mosaic virus,

Nicotiana tabacum 2061.

effects on exo-1,4- β -D-xylosidase activity, substrate specificity,

Aspergillus niger 7725.

effects on extracellular enzymes, proteinase, *Bacillus megaterium* 4292.

effects on fermentation, amino acids levels, commeal, lactic acid bacteria 7881.

effects on fishery products, microorganisms contamination 702.

effects on *Fusarium oxysporum* f.sp. *ciceri* colonization, plant debris, saprophyte,

soil 5618.

effects on gas production, cheese production, *Clostridium tyrobutyricum* 4462.

effects on, growth, association, single-cell protein, production, *Candida valida*,

continuous culture, ethanol 214.

effects on growth, *Escherichia coli*, *Salmonella typhimurium*, hot-boning, beef

6959.

effects on growth rate, *Endothia parasitica*, hypovirulence, use biological

control, blight, *Castanea dentata* 8184.

effects on hydrogen gas production, *Rhodospirillum rubrum* 5219.

effects on hydrolytic pressure disinfection, *Escherichia coli* 5886.

effects on *Melampodium betulinum*, ureidinosporous, spore germination, rust,

Betula 8950.

effects on, *Methanosaeta*, *Methanotrix*, methanogenesis, digestion (anaerobic)

3980.

effects on molds food contamination corn, toxins production 2749.

effects on *Monilia fructicola* conidia spore germination, size, pathogenicity,

in vitro, in fruit, *Prunus persica*, *Prunus persica* nectarina 7992.

effects on mycotoxins biosynthesis, *Alternaria alternata*, wheat 5371.

effects on, *Nitrosomonas europaea*, nitrous oxide, production, soil 7274.

effects on *Nomuraea rileyi*, *Pseudosulcia* includes, pest control, biological

control, *Anticarsia gemmatilis* 5212.

effects on nutrient uptake, vesicular-arbuscular mycorrhizas, inoculum density,

Trifolium repens 8214.

effects on organoleptic properties, wine, musts fermentation 1871.

effects on oxygen transfer, rotating discs, wastewater treatment 1471.

effects on phenyl carbonic acids production, flavor, wort fermentation, beer

2682.

effects on, *Phytophthora cinnamomi*, infection, roots, *Eucalyptus marginata*,

Eucalyptus calophylla 3912.

effects on plasmid pLP11, stability, *Bacillus licheniformis*, transformation, gene

expression, β -lactamase, *Bacillus stearothermophilus* 8543.

effects on plasmids curing, lactose fermentation, identification, media

(culture), *Streptococcus lactis* 7864.

effects on *Populus* disease resistance, *Melampsora medusae* infection 360.

effects on post-harvest decay, fungal flora, corn, rice 2051.

effects on *Rhizobium leguminosarum*, nitrogen fixation, nodules, *Pisum sativum*

2987.

effects on *Rhizobium*, nitrogenase, nitrogen fixation, *Vigna unguiculata* 2168.

effects on *Rhizobium trifolii* infectivity, nodulation, *Trifolium repens* 1282.

effects on sclerotia germination, *Sclerotium rolfsii* 6338.

effects on *Septoria nodorum* sectoring, role, pathogenicity, *Hordeum vulgare*

isolates 1994.

effects on *Septoria nodorum* sporulation, *Triticum aestivum* 5432.

effects on, sewage sludge, composting microorganisms, succession 5819.

effects on single-cell protein production, ethanol fermentation, *Candida*

tropicalis 4411.

effects on, soil microorganisms, denitrification, soil 4672.

effects on spoilage, yeasts, confectionery 8698.

effects on sporulation, biosynthesis, bacitracin, extracellular enzymes,

proteinase, *Bacillus licheniformis* 4873.

effects on sporulation, teliospores, ureidinosporous, infection, *Cronartium*

flaccidum, *Vincetoxicum officinale* 3927.

effects on susceptibility, *Metharhizium anisopliae*, *Metharhizium flavoviride*,

biological control, *Othynychus sulcatus* 2650.

effects on tyrosin stability 7455.

effects on, *Zyromyces phaseoli* infection, appressoria formation, plants 1964.

effects on vesicular-arbuscular mycorrhizas spore germination, hyphae growth 402.

effects on, viruses, microbial pollution, survival, adsorption, ground water

5858.

effects on wastewater treatment, industrial effluents, meat industry, anaerobic

conditions, bioreactors 3196.

effects on *Zyophthora radicans* sporulation, mortality, biological control,

Thenoaphis trifolii 1855.

ethanol production, effects on, *Kluyveromyces marxianus* 3588.

glucose isomerase production, *Streptomyces fradiae* 8598.

incubation, role, *Campylobacter fetus* subsp. *jejuni* isolation, man feces 1648.

indicator species mortality, digestion (aerobic), sewage sludge 1485.

kinetics, bioreactors, microorganisms 1534.

Metharhizium anisopliae inoculum production, biological control, *Ceropidae* 5266.

monitoring, flame sterilization, canned food, sterilizers 7022.

Myrothecium roridum, effects on leafspot, *Diefenbachia maculata* 6255.

Temperature, (continued)

night, effects on susceptibility, *Pyricularia oryzae*, blast, seedlings, *Oryza sativa* 7958.
peat, effects on methanogenesis, methanogenic bacteria 8264.
pH, effects on, enzymes, activity, physicochemical properties, microorganisms, surveys, industries 58.
proline hydroxylation, *Streptomyces griseoviridis* 5109.
psychrotrophic bacteria, spoilage, shelf life, poultry, meat products 6972.
range analysis, bacteria growth, meat 1061.
relationship, viability, ethanol, effects on, *Saccharomyces cerevisiae*, reviews 6106.
rosaphere, effects on, ectomycorrhizas, vesicular-arbuscular mycorrhizas formation, forests soil 5549.
RNA association, batch culture, *Saccharomyces cerevisiae* 799.
role, β -cyano-D-alanine inactivation, D-alanine aminotransferase activity, *Bacillus sphaericus* 7717.
role, *Meloidium pumila* fruit susceptibility, *Venturia inaequalis* scab 2797.
role, southern bean mosaic virus strains isolation, pathogenicity, *Vigna unguiculata* 2777.
sporulation, bacitracin biosynthesis, proteinase biosynthesis, temperature, *Bacillus licheniformis* 5974.
Staphylococcus aureus growth, cheese 6960.
Staphylococcus aureus growth, enterotoxin A formation, canned food, bacon 6979.
storage, effects on: coliforms enumeration, drinking water 564.
Vibrio parahaemolyticus isolation, seafood, growth optimization 194.
Temperature tolerance,
acid production, dairy starters, lactic acid bacteria 6187.
dairy starters, *Streptococcus lactis*, *Streptococcus cremoris*, proteinase, deficiency, lactic acid production 2732.
Lactobacillus viridescens, association ham 7027.
Temperature-sensitive mutant,
cold, *Propionibacterium* dairy starters, mutagenesis.
N-nitroso-N-methyl-N-nitrosoguanidine 2729.
respiratory syncytial virus, proteins, purification, characterization, infected cell culture 3437.
Tentoxin,
Alternaria alternata, biosynthesis, isolation 2762.
biosynthesis, *Alternaria alternata*, phosphate effects on 5395.
Tenuazonic acid,
association, *Alternaria alternata* leaf blight, tenuazonic acid, characterization 5394.
Tetratosperma oligocladium,
hyperparasitism, *Sclerotinia*, biological control, phytopathogenic fungi 975.
Tetrolol,
production, 3',5'-cyclic-nucleotide phosphodiesterase inhibitors, *Streptomyces* *showdoensis* 3585.
structure, *Streptomyces showdoensis*, inhibitors, 3',5'-cyclic-nucleotide phosphodiesterase 3585.
Termitomyces,
fruit bodies, conidia, cellulase, β -D-glucosidase, purification, characterization 6044.
Termitomyces cypaeus,
lignocelluloses biodegradation, sugars production 3527.
Terpenoids,
aldehydes phytoalexins, *Gossypium barbadense*, accumulation association
Verticillium dahliae wilt 2824.
roots exudates, disease resistance, *Fusarium oxysporum* f.sp.vasinefectum, wilt, *Tomopis hirsutum* 8883.
Terracyclic acid A,
biosynthesis, *Aspergillus terreus* 7475.
Terracyclo,
Aspergillus terreus, structure, antimicrobial activity 5802.
Terrell,
plants growth regulators, structure, biosynthesis, *Aspergillus terreus* 2668.
Territrem C,
characterization, *Aspergillus terreus* 1928.
Tertiary butylhydroquinone,
antibacterial activity, casein, corn oils, effects on 6450.
Tetanus,
Clostridium tetani antibodies, enzyme-linked immunosorbent assay methodology, man 780.
immunity, enzyme immunoassay, detection, man, methodology 8461.
Tetrachaetum elegans,
pectinolytic enzymes activity, biodegradation, *Alnus* leaves, calcium concentration effects on 1002.
Tetrazolophthaloyl dipeptide methyl esters,
derivatives, synthesis, antimicrobial activity 9134.
Tetracycline,
antibacterial activity, clinical isolates, *Streptococcus pneumoniae* 9153.
antibacterial activity comparison, ofloxacin, *Chlamydia trachomatis* 9199.
antibiotic resistance, association, transposon 10, *Haemophilus parainfluenzae*, homology, *Escherichia coli* 9073.
antibiotic resistance, clinical isolates, *Escherichia coli* 4004.
antibiotic resistance, *Escherichia coli*, isolation, chickens 3032.
antibiotic resistance, fecal coliforms, pigs, characterization 1317.
antibiotic resistance, gene transfer, *Clostridium perfringens*, characterization 3013.
antibiotic resistance genetic markers, conjugation, plasmids deficiency, *Streptococcus pyogenes* 6426.
antibiotic resistance, plasmid RP4, continuous culture, *Escherichia coli* 7351.
antibiotic resistance, plasmids, DNA, restriction endonuclease mapping, *Haemophilus ducreyi* 3027.
antibiotic resistance, R factors, *Escherichia coli* 2206.
antibiotic resistance, R factors transfer, *Staphylococcus aureus* 9044.
antibiotic resistance, transposon Tn10, repressors, binding sites, genetic control, *Escherichia coli* 1315.
antibiotic sensitivity testing, antibiotic resistance resistance *Staphylococcus aureus* 7424.
antibiotic sensitivity testing, *Bacteroides nodosus* 3056.
antibiotic sensitivity testing, dilution tests, *Mycoplasma*, animal isolates, chickens 3087.
antibiotic sensitivity testing, *Neisseria gonorrhoeae* 4804.
biosynthesis, *Streptomyces*, fermenters, carbon dioxide pressure effects on 2281.
Clostridium perfringens drug sensitivity testing 3085.
coliforms resistance, incidence, feces, man, hybridization analysis 1316.
drug resistance, clinical isolates, *Haemophilus influenzae*, *Haemophilus*

Tetracycline, (continued)

parainfluenzae 3035.
effects on *Bacillus subtilis*, sporulation, stringent response 2242.
effects on *Escherichia coli* enterotoxins, biosynthesis, properties 228.
Tetrahydro-2(1H)-pyrimidinone,
derivatives, antiviral activity, structure-activity relationships 8321.
Tetrahydroiterosanol B,
Alternaria solani, structure, new records 3576.
Tetrahydrocannabin,
effects on *Aspergillus parasiticus* aflatoxins biosynthesis 1075.
Tetrahydrofolate,
biosynthesis inhibition, antibiotics antibacterial activity 9174.
5,6,7,8-Tetrahydrofolate,
preparation, use tetrahydrofolate dehydrogenase immobilization, *Lactobacillus casei* 8575.
Tetrahydrofolate dehydrogenase,
immobilization, use 5,6,7,8-tetrahydrofolate preparation 8575.
inhibition, X-ray diffraction, mathematical models, *Lactobacillus casei* 4323.
methotrexate inhibition, kinetics, *Neisseria gonorrhoeae* 8579.
purification, *Escherichia coli*, plasmid pTp 6-10, cloning vectors, transformation 99.
trimethoprim drug resistance, role, *Escherichia coli* 6429.
Tetrahydrofolate synthase,
yeasts, antigenic characteristics, cross-reactivity, structure, formyltetrahydrofolate synthetase, *Clostridium acidiciu* 8590.
Tetrahydrofuran,
metabolism, reviews 7824.
3',4,6-Tetrahydro-5,5'-dimethyl-2,2'-bi-p-benzoquinone,
Chaetomium aureum, antibacterial activity, antifungal activity 8367.
1,3,6,8-Tetrahydroxyanthraquinone,
biosynthesis, *Verticillium dahliae* liquid culture 972.
3',4,5'-Tetrahydroxystilbene,
wood extracts, *Cassia garretiana*, antifungal activity, structure-activity relationships, *Penicillium citrinum*, *Rhizopus nigricans* 7384.
Tetrahymena pyriformis,
use, screening, trichothecenes food contamination, corn 7055.
Tetrapyroles,
biosynthesis, bacteria, reviews 4380.
biosynthesis, *Clostridium* 5210.
biosynthesis, methanogenic bacteria 6095.
cyanocobalamin like compounds, biosynthesis, *Clostridium* 7779.
Tetraosodium ethylenediaminetetracetate,
hypertrachelycine, fishery products preservation, vacuum packaging 7885.
Tetrazolium blue,
staining, use, viruses plaque assay, cells transformation assays 9275.
use, antibiotic sensitivity testing, *Streptococcus* 3083.
Tetrazolium bromide,
staining; osposres, spore germination, viability 805.
Textile industry,
fabrics, desizing, α -amylase, fungi, bacteria 52.
humidifiers, *Cytophaga* endotoxins, allergic alveolitis, man 1944.
industrial wastes, spinning, cotton, biodegradation, lignocelluloses, *Pycnoporus cinnabarinus* 6164.
industrial wastes, wastewater treatment, reviews, bibliographies 4915.
wool, industrial wastes, composting 5837.
Textiles,
biodegradation tests 2721.
hydrophobicity, use immobilization, β -D-galactosidase, β -D-glucosidase, exo-1,4- α -D-glucosidase 5142.
Thailand,
Cruciferae, black rot, epidemiology, etiology 287.
Oryza sativa varieties, rice ragged stunt virus disease resistance 8100.
Thaili,
Hemileia vastatrix development, *Coffea arabica* infection 7185.
Thamnidium elegans,
growth conditions, meat, food contamination 6193.
Thawing,
soil, soil microorganisms, nitrous oxide production, denitrification 7285.
Thielephora,
ectomycorrhizas, liquid culture, inoculum production 5937.
isolation, pure culture, methodology, nutrient requirements, reviews 829.
mycorrhizas, *Coniferale* seedlings, cold storage, ethylene, fungicides, effects on survival 5581.
Thielephora terrestris,
ectomycorrhizas, mycelia, inoculation, seedlings, *Pinus banksiana* 7227.
inoculation, growth stimulation, *Picea sitchensis* 5565.
inoculation, *Picea sitchensis* seedlings, silviculture 345.
inoculation, stimulation growth, nutrient uptake, seedlings, greenhouses, *Pinus* 5567.
trees inoculum production methodology, reviews 830.
Thiebaldia longiareolata,
larvae, crowding effects on, *Bacillus thuringiensis* subsp.israelensis lethality 124.
Theobroma cacao,
black pod, *Phytophthora*, maturity effects on 7993.
pod rot, disease control, metalaxyl, cuprous oxide, *Phytophthora palmivora* 5526.
Therioaphis trifolii,
mortality, biological control, *Zoophthora radicans*, sporulation, temperature effects on 1855.
Thermal denaturation,
sulfitase inhibitors, C.D., *Streptomyces* 7674.
Thermal injury,
enterotoxin A production, *Staphylococcus aureus* 7913.
fungi spores, preservatives effects on, germination, growth 1072.
Thermal stability,
 α -amylase, purification, characterization, *Thermoactinomyces* 7695.
 β -amylase, purification, characterization, *Thermoactinomyces* 3450.
Bacillus thermoproteolyticus neutral proteinase, immobilization, activity, radiation polymerization 1759.
catalase, histidine decarboxylase, *Micrococcus* 8594.
cellulase production, *Thielavia terrestris* 5181.
chymosin, *Mucor miehei* 79.
coagulase, *Thermoactinomyces aureus* 8565.
endo-1,3- β -D-xylanase production, *Thielavia terrestris* 5181.
enzymes, genetic engineering, food industry, thermophilic microorganisms 3495.
enzymes, immobilized cells, *Caldanella acidophila*, ultrafiltration membranes

Thermal stability, (continued)

764.
esterase multiple forms, *Aspergillus niger* 1786.
 β -D-glucosidase, *Thermomonospora* 4344.
 β -D-glucosidase, *Thermomonospora* 5973.
lactate dehydrogenase, *Thermus caldophilus* 68.
phosphoglucanate dehydrogenase, comparison *Bacillus stearothermophilus*, yeasts 73.
proteinase, *Bacteroides nodosus*, characterization 7757.
Thermomononmyces,
 α -amylase, purification, characterization, thermal stability 7695.
 β -amylase, purification, characterization, thermal stability 3450.
distribution, incidence, pasture, nematocides effects on 7295.
Thermomononmyces candidus,
dust, isolation, enumeration, methodology comparison 1646.
Thermomononmyces vulgaris,
 α -amylase hydrolysis oligosaccharides 1777.
Thermomonobacter ethanolicus,
ethanol production, carbohydrolases utilization 5283.
ethanol production, hemocelluloses fermentation 5284.
 β -D-glucosidase, cellobiose hydrolysis 3493.
Thermomonobium Brockii,
 β -oxoesters reduction 8654.
Thermoplasma aurantiacum,
proteinase, biosynthesis, activity 2579.
Thermoclin,
Bacillus stearothermophilus, antibacterial activity mechanisms 3127.
Thermodynamics,
association thermophilic bacteria diversity, sewage sludge 546.
bioreactors 1533.
calorimetry, continuous culture, fermentation, *Saccharomyces cerevisiae*,
Escherichia coli 6080.
energy utilization, microorganisms 853.
mathematical models, fermentation, *Clostridium* 3549.
Thermomonospora,
cellulase, cellulose hydrolysis, feedback inhibition, glucose, cellobiose 8692.
cellulase, hydrolysis, lipoglucosylases, solvents pretreatment 8683.
 β -D-glucosidase, thermal stability 4344.
 β -D-glucosidase thermal stability 5973.
Thermomonospora curvata,
cellulase biosynthesis, catabolite repression resistant mutant 1746.
2,6,6-trimethyl-2-cyclohexene-1,4-dione, conversion,
(*GR*)-2,6,6-trimethyl-1,4-cyclohexadiene 5072.
Thermomonospora fusca,
cellulase activity, ethanol, cellobiose, glucose, metals ions, effects on 1804.
 β -D-glucosidase activity, saccharides effects on 1796.
Thermomonocase,
activity detection, *Staphylococcus aureus* identification methodology, blood culture 1655.
Thermophilic bacteria,
acidophilic bacteria, minerals sulfide oxidation 416.
alkaline phosphatase production, *Thermus ruber* 6881.
Campylobacter, media (enrichment), isolation, water 6754.
coupling factor 1, +magnesium+cadmium complex, reaction mechanisms, structure 895.
cytochrome c oxidase, oxygen, carbon dioxide reaction mechanisms, kinetics 7755.
digestion (anaerobic), manure, pigs methane 7523.
diversity, sewage sludge thermodynamics association 546.
dust, isolation, enumeration, methodology comparison 1646.
enzymes, biotechnology 7268.
enzymes, biotechnology 7754.
ethanol tolerance, factor affecting fermentation physiology 6135.
immobilized cells, *Thermus rubens* sp. nov., fumarate hydratase, fumaric acid conversion, L-malic acid 9.
methanogenesis, films, bioreactors, anaerobic conditions, wastewater treatment 4926.
methylophilic bacteria, methanol utilization, single-cell protein production, harvesting 8515.
Thermomononmyces, α -amylase, purification, characterization, thermal stability 7695.
use, dairy starters, reviews 212.
Thermophilic fungi,
composts, straw, *Triticum aestivum*, *Vicia faba* 6168.
single-cell protein, protein composition, amino acid composition, lipid composition, vitamins 860.
survival, composting, food processing industrial wastes 4114.
Thermophilic microorganisms,
Bacillus, α -amylase, β -amylase, purification, characterization 7705.
Bacillus stearothermophilus, culture, dissolved oxygen levels, temperature effects on 9296.
competition, starter cultures, composting, bark 4103.
composts, Basidiomycetes culture 1681.
enzymes, thermal stability, genetic engineering, food industry 3495.
fermentation, agricultural wastes, use, cultivation, *Agaricus bisporus* 8408.
media (culture), use, GELRITE gum 3335.
sewage sludge, waste treatment 1465.
survival, composting, food processing industrial wastes 4114.
Thermoplasma quinone,
Wolfinella succinogenes, spectrometry, N.M.R. 6894.
Thermus aquaticus,
calcidiol, calcium, lanthanide binding 7760.
Thermus caldophilus,
lactate dehydrogenase, purification, kinetics, thermal stability 68.
Thermus rubens sp. nov.,
immobilized cells, fumarate hydratase, fumaric acid conversion, L-malic acid 9.
Thermus ruber,
alkaline phosphatase production 6881.
Thermus thermophilus,
malate dehydrogenase, kinetics, poly(ethylene glycol) bound NAD⁺ derivatives effect on 76.
Thiabendazole,
disease control, *Ascochyta rabiei*, disease transmission, *Cicer arietinum*, seedlings 1969.
disease control, pathogens, fungi, *Agaricus brunneus* 8132.
disease control, post-harvest decay, oranges, stem rot, green mold 5470.
resistance, *Penicillium italicum*, *Penicillium digitatum*, post-harvest decay,

Thiabendazole, (continued)

benzimidazoles 2901.

1-Thiasephem,analogs, synthesis, antibacterial activity, structure-activity relationships, *Escherichia coli*, *Klebsiella pneumoniae* 4824.**Thiazelozone**,drug resistance, *Mycobacterium tuberculosis* 4721.
drug sensitivity testing, drug resistance, *Mycobacterium tuberculosis* 4717.**Thiadiazolopyrazolones**,

antibacterial activity, antifungal activity 1321.

Thiamindiphosphate kinase,isolation, purification, characterization, *Saccharomyces carlsbergensis* 6014.
purification, characterization, *Saccharomyces carlsbergensis* 7739.**Thiamphenicol**,

analogs, antibacterial activity 6542.

Clostridium perfringens drug sensitivity testing 3085.**Thianaphthene**,

biodegradation, bacteria, reviews 7825.

Thielaia basicola,antagonism, *Rhizobium* growth, in vitro 7248.**Thielaia terrestris**,cellulase, endo-1,3- β -D-xylanase, production, thermal stability 5181.
Trichoderma reesei, penicillium, sporotrichum cellulolysis, cellulase, physicochemical properties, comparison 6006.**Thielaeviopsis**,

fruit rot, post-harvest decay 8876.

Thienamycin,analogs, synthesis 6576.
antibacterial activity reduction, Bactec test media, Thiol broth 6458.
antitoxigenic synergism, streptomycin, antibacterial activity, gram-negative bacilli, *Staphylococcus aureus* 6504.
piperacillin, antibiotic antagonism, antibacterial activity, *Pseudomonas aeruginosa* 7442.
production, immobilized cells, *Streptomyces cattleya* 5805.
production, *Streptomyces cattleya* immobilized cells 518.
Streptococcus group B susceptibility 1381.**Thimerosal**,

disinfection, antigens extracts, fungi, pathogens, clinical microbiology 810.

Thin-layer chromatography,aflatoxins determination, grain dusts 3704.
aflatoxins, food contamination, nuts, grain 7108.
comparison, liquid chromatography, analysis, aflatoxins, food contamination, peanuts 8731.3'-5'-cyclic-nucleotide phosphodiesterase, *Vibrio harveyi* 3279.

detection, aflatoxin B1, ochratoxin A, olive oil 1931.

detection, mycotoxins, contamination, food 5366.

detection, penicillin, metabolites, fungi 8433.

high-pressure liquid chromatography, analysis, aflatoxins, fatty acids

fluorescence, grain, *Zea mays* 8726.identification, *Mycobacterium avium-intracellulare-scrofulaceum*, glycolipids 689.

lipid A fractions, enzyme-linked immunosorbent assay 5064.

measuring techniques, polybrominated nucleotidyltransferase activity,

Escherichia coli 1589.

methodology, detection, mycotoxins, animals feeds 7053.

Mycobacterium bovis identification methodology 5895.

use, detection, rubratoxin B, animals feeds, methodology, factors affecting 7054.

Tinning,*Pseudotsuga menziesii*, association *Verticillium dactyloides* stain 3924.**Thiobacillus**,

enzymes, isolation, characterization, thiosulfate acid oxidation 942.

plasmid pT11, transformation, association, mining 8262.

sulfur leaching, coal 3976.

Thiobacillus ferrooxidans,

coal, sulfur leaching 3974.

coal, sulfur removal, mathematical models 5694.

cobaltous sulfide leaching, role, iron(II) 9030.

copper leaching, industrial wastes 7301.

ferrous sulfate, iron(II) oxidation, kinetics, chemostats 3000.

mercuric reductase isolation, characterization 6010.

oxidation, ores extraction, gold, silver 3001.

pyrite oxidation, man release, role adsorption 5691.

sulfur bioaccumulation, localization 2181.

uranium resistance 1311.

mixed culture, *Thiobacillus thiooxidans*, removal, arsenic, sulfur compounds 8261.**Thiobacillus novellus**,

pyruvate carboxylase, purification, characterization 6847.

Thiobacillus thiooxidans,

mass spectroscopy, ornithine containing lipids 5024.

mixed culture, *Thiobacillus ferrooxidans*, removal, arsenic, sulfur compounds 8261.**Thiobacillus versutus**,

cell membranes, multienzyme complexes, electron transport chain, cytochrome c551,

cytochrome c552.5, purification, characterization 7703.

Thioctic acid,

localization, dihydrolipoamide dehydrogenase+oxoglutarate dehydrogenase

(lipoamide)+ dihydrolipoamide succinyltransferase multienzyme complexes, electron

microscopy, *Escherichia coli* 7702.**Thiocyanate**,+lactoperoxidase, +hydrogen peroxide, antibacterial activity, *Streptococcus*

agalactiae, cystine, reduction, antagonism 3058.

Thioesters,phalloidin cross-linking, conformation, N.M.R., C.D., *Amanita phalloides* 3755.**Thiol broth**,

inactivation, penicillins 512.

Thiolester hydrolase,*Pseudomonas putida*, 2-(2,4-dichlorophenoxy)ethyl sulfate activation, soil 880.**Thiophanate-methyl**,drug tolerance, identification methodology, *Fusarium* 7213.role, *Colletotrichum gloeosporioides* polygalacturonase inhibition 1224.**Thiophene**,

derivatives, antifungal activity photoinduction 3060.

2-Thiophenecarboxylic acid,

biodegradation, bacteria, reviews 7825.

Thioredoxin,tertiary structure, protein structure, *Escherichia coli*, page T4, homology,

- Thioredoxin**, (continued)
glutaredoxin 766.
- Thiosemicarbazones**,
2-acetylpyrimidine, 2-acetylquinoline, 1-acetylisoquinoline,
3-acetylisoquinoline, antibacterial activity, Enterobacteriaceae, *Staphylococcus aureus*, *Neisseria* 7372.
- Thiosulfic acid**,
oxidation, *Thiobacillus* enzymes, isolation, characterization 942.
- Thiosulphate sulphurtransferase**,
soil microorganisms, humus, forests, *Picea* 2916.
- Thiotetramycin**,
analogs, synthesis, antibacterial activity 2272.
- structure, *Streptomyces* 3168.
- 5'-O-(3-Thiotriphosphate)**,
hydrolysis, inorganic pyrophosphatase, yeasts 3511.
- Thiotropin**,
Pseudomonas, structure 6551.
- Thiorosa**,
disease control, *Butyrodiploia theobromae*, fruit rot, *Citrus reticulata* 5525.
- Thiram**,
efficacy, phytopathogenic fungi incidence, *Phaseolus vulgaris* 2086.
seed treatments, disease control, damping-off, downy mildew, *Brassica* 8141.
seed treatments, seed-borne diseases, *Pinus roxburghii* 8176.
sensitivity, ectomycorrhizas, silviculture 7299.
- Thorium**,
adsorption, *Rhizopus arrhizus* biomass 3978.
- Threo-1-phenyl-2-nitro-1,3-dicetoxypropane**,
effects on rRNA 18S, rRNA 25S levels, *Fusarium oxysporum* 8921.
- Threonine**,
homoserine biosynthesis, effects on, *Brevibacterium flavum* 857.
overproduction, mutants, transformation, *Brevibacterium lactofermentum* 5116.
- Threonine dehydratase**,
L-isoleucine inhibition, allosteric properties, kinetics, *Saccharomyces carlsbergensis* 7727.
- Throat**,
isolates, man, *Streptococcus* identification methodology 1669.
swabs, slides, *Streptococcus* identification, clinical microbiology 717.
- Thuja plicata**,
seedlings, mycorrhizas growth, forests litter effects on 5546.
- Thymidine**,
incorporation analysis, cell culture, *Mycoplasma* infection screening 4190.
incorporation, DNA, bacteria, measuring techniques 5907.
inhibition nucleosides analogs antiviral activity, herpes simplex virus 1, virus 460.
- Thymidine kinase**,
antigenic characteristics, typing, herpes simplex virus, clinical isolates 594.
herpes simplex virus 1, phosphorylation, sensitivity relationship,
9-(2-hydroxyethoxymethyl)guanine, (2-bromovinyl)-2'-deoxyuridine 2225.
loci, relationship, 9-(2-hydroxy ethoxymethyl)guanine, resistance, herpes simplex virus 1 5723.
- Thymidine-2-oxoglutarate dioxygenase**,
purification, characterization, electrophoresis, chromatography, *Neurospora crassa* 5122.
- Thyronectria austro-americana**,
growth conditions 7634.
- Thiabendazole**,
seed treatments, seed germination, *Zea mays* 2094.
- Thiamulin**,
antibiotic resistance, antibiotic sensitivity testing, *Mycoplasma*, animal isolates, chickens 3067.
- Thiazofurin**,
synergism, ribavirin, selenazofurin, antiviral activity, logavirus, bunyavirus, arenavirus 9117.
- Ticarcillin**,
antibacterial activity, Enterobacteriaceae 4809.
antibiotic synergism, amikacin, antibiotic sensitivity testing, *Pseudomonas aeruginosa*, *Pseudomonas cepacia*, clinical isolates, cystic fibrosis, children 3170.
- bacterial activity, *Pseudomonas aeruginosa*, agar diffusion test, companion, dilution tests 4841.
± clavulanic acid, antibacterial activity, clinical isolates, Enterobacteriaceae 4835.
± clavulanic acid, antibacterial activity, Enterobacteriaceae 9191.
± clavulanic acid, antibacterial sensitivity testing, gram-negative bacteria, *Staphylococcus aureus* 4786.
± clavulanic acid, disc-diffusion test, antibiotic sensitivity testing, bacteria, clinical isolates 5774.
± rifampicin + tobramycin, antibacterial activity 8357.
Streptococcus group B susceptibility 1361.
- Tick-borne encephalitis virus**,
antibodies, immunoglobulin M, detection, indirect fluorescent antibody test, 2-mercaptoethanol, man 7557.
immunoglobulin M, immunoglobulin G, enzyme-linked immunosorbent assay standardization, serum levels, man 2447.
propagation, cell culture, methodology 2433.
- Tillage**,
association, pathology, take-all, *Gaeumannomyces graminis* var. *tritici*, *Triticum aestivum* 7977.
disease control, *Peronosclerospora sorghi* downy mildew, *Sorghum bicolor* 1175.
soil microorganisms 2140.
- Tilletia caries**,
spore germination, lectins effects on 3877.
- Tilletia foetida**,
virulence, races, bunt, *Triticum aestivum*, Pakistan 7965.
- Time**,
effects on *Aspergillus parasiticus* aflatoxins biosynthesis, in vitro 7067.
effects on culture, fungi, clinical isolates, spurt 807.
planting density, effects on, leafspot, *Cercospora canescens*, pathogenesis, *Phaseolus mungo* 7929.
Vibrio parahaemolyticus isolation, seafood, growth optimization 194.
- Tin**,
antifungal activity, *Cunninghamella echinulata*, *Fusarium oxysporum* 1341.
biocides, paints, inhibition activated sludge, wastewater treatment 6673.
- Tinidazole**,
synergism, ampicillin, doxycycline, cotrimoxazole, antibacterial activity,
- Tinidazole**, (continued)
anaerobic bacteria 7366.
- Tioconazole**,
antibiotics, antifungal activity, relative inhibition factors measurements, dose-response effects 4017.
- Tipula iridescent virus**,
pathogens, natural enemies, surveys, use, biological control, bacteria 2662.
- Tipula paludosa**,
natural enemies, pathogens, *Tipula iridescent virus*, nuclear polyhedrosis virus, bacteria, use, biological control 2662.
- Tires**,
bulking agents, composting, sewage sludge, aeration 4082.
- Tissue culture**,
identification, cytomegalovirus, monoclonal antibodies, fluorescence, staining, methodology 8441.
identification, influenza virus, immunofluorescence, models 610.
meristem tip culture, plant viruses, plant breeding 3859.
methodology, herpes simplex virus 1, herpes simplex virus 2, isolation, identification 650.
methodology, live vaccines production, rinderpest virus 3181.
Nicotiana tabacum, Agrobacterium rhizogenes transformation, effects on susceptibility, infection, tobacco mosaic virus, potato virus Y 8076.
petioles, ribavirin, antiviral activity, potato virus Y, tobacco mosaic virus, cucumber mosaic virus, *Nicotiana tabacum* 3904.
Sindbis virus detection, immunoelectron microscopy methodology 8443.
systems, bovine rhinotracheitis virus plaque assay 4155.
- Titration**,
detection, polyoma virus, genomes, mice, methodology 6744.
detection, *Yersinia pseudotuberculosis* subsp. *pestis*, antigens, radioimmunoassay 1574.
leaves, variability, inclusion bodies, potyvirus 8825.
persistence, *Kloricin*, disease control, stalk rot, *Erwinia chrysanthemi*, *Zea mays* 8929.
plants, tobacco mosaic virus RNA detection, hybridization analysis, enzyme-linked immunosorbent assay 4499.
Solanum tuberosum, *Corynebacterium sepedonicum* infection diagnosis 8869.
- Titanium(III)**,
nitritolactic acid, use, *Butyribacterium methylotrophicum* media 769.
- Titanium**,
surfaces, microorganisms colonization, rivers water exposure 3650.
- Titanium citrate**,
reducing agents, media (culture), enumeration, inhibition, growth, anaerobic bacteria, rumen 9301.
- Titration**,
chloramphenicol 5779.
methodology, brucellosis diagnosis, Coomb's test 784.
- Tobacco**,
microorganisms biodegradation, books 1683.
post-harvest decay, *Meloidogyne arenaria* incidence, USA, South Carolina 3852.
- Tobacco etch virus**,
Aphididae, association, helper factor, disease transmission, *Nicotiana tabacum* 4552.
disease resistance, cultivars, *Capsicum annuum* 8070.
disease resistance, plant breeding, cultivars, *Capsicum annuum* 8902.
disease resistance, plant breeding, cultivars, *Capsicum annuum* 8909.
- Tobacco leaf curl virus**,
Nicotiana tabacum, China, Peoples Rep. 7182.
- Tobacco mosaic virus**,
Ampelopsis proliferans, leaves, extracts, antiviral activity 8333.
antiviral activity, Chenopodium amrosiodors plant extracts, foliar applications, disease control 8140.
antiviral activity, ribavirin, petioles tissue culture, *Nicotiana tabacum* 3904.
antiviral agents, effects on 4024.
+bean golden mosaic virus, mixed infection, *Phaseolus vulgaris*, pathogenesis 244.
coat protein, mRNA characterization, *Nicotiana tabacum* mesophyll protoplasts 286.
enzyme-linked immunosorbent assay detection, dieback, *Fraxinus americana* 8951.
experimental infection, *Nicotiana tabacum*, inoculation methodology 6264.
hypersensitive response, ethylene biosynthesis, temperature, light effects on, *Nicotiana tabacum* 2061.
infection, *Capsicum annuum*, characterization 2018.
infection, *Capsicum*, identification 8828.
infection, disease resistance, *Phaseolus vulgaris*, relationship, leaves sucrose content, light 8886.
infection, ethylene biosynthesis, hypersensitive response, *Nicotiana tabacum* 2080.
infection, hypersensitive response proteins, isolation, leaves, hypersensitive response 7199.
infection, Lycopersicon esculentum, pathogenicity, cross-protection 8042.
infection, *Nicotiana tabacum*, hypersensitive response, lignification enzymes 7193.
infection, plants, hypersensitive response, proteins analysis 7916.
infection, susceptibility, Agrobacterium rhizogenes transformation *Nicotiana tabacum* roots tissue culture effects on 8076.
infection, *Vigna unguiculata* mesophyll cells, pathogenesis 6225.
infectivity, abscisic acid, Chenopodium amaranticolor 2044.
infectivity, *Phaseolus vulgaris*, *Nicotiana tabacum*, *Tritrachium alkaline* proteinase inhibition 2806.
infectivity, replication, disease control, α -interferon, *Nicotiana tabacum* 8828.
mixed infection, *Glomus*, *Lycopersicon esculentum*, electron microscopy 4535.
multiplication, spreading, *Nicotiana tabacum* cultivars, aspirin, polyacrylic acid effects on 1141.
plant diseases, *Nicotiana tabacum*, inhibitors, antiviral activity 4575.
polyanions antiviral activity 9129.
+potato virus X mixed infection, *Datura stramonium* leaves lesions 288.
ribavirin, antiviral activity, characterization 8332.
ribonucleoproteins, role, disease transmission, characterization 8862.
RNA biosynthesis, inhibition, 2-(α -hydroxybenzyl)benzimidazole, disease control, *Nicotiana tabacum* 7216.
RNA, detection, hybridization analysis, enzyme-linked immunosorbent assay, plants, tissues, protoplasts 4499.
- Tobacco necrosis virus**,
disease resistance, *Vigna unguiculata*, nutrition effects on 312.
hypersensitive response, *Nicotiana tabacum* 2057.
infection, *Cucumis sativa* cotyledons, proteins fraction characterization 1143.
infection, ethylene biosynthesis, hypersensitive response, *Nicotiana tabacum*

Tobacco necrosis virus, (continued)

2060.
infection, *Vigna unguiculata* mesophyll cells, pathogenesis 6225.
Tobacco rattle virus,
infection, *Lycopersicon esculentum*, pollen, formation, ultrastructure 8005.
spraying, disease resistance, *Solanum tuberosum*, Denmark 8910.
Tobacco ringspot virus,
enzyme-linked immunosorbent assay detection, dieback, *Fraxinus americana* 8951.
hosts, weeds 3818.

- Tobacco streak virus**,
disease transmission, seed-borne diseases, *Frangula vesca* 6267.
isolation, characterization, host range 4565.
Tobacco vein mottling virus,
detection, identification, *Nicotiana tabacum* 6271.

Tobago

- nitrogen-fixing bacteria, soil 6359.

- Tobamovirus**,
immunoelectron microscopy, concentration, methodology 651.
infection, identification, Capsicum 8828.

- Tobramycin**,
antibacterial activity, clinical isolates 7444.
antibacterial activity, *Mycobacterium fortuitum*, *Mycobacterium chelonae* 4850.
antibiotic resistance, R factors characterization, clinical isolates,
 Staphylococcus aureus 9178.
antibiotic sensitivity testing, AutoMicrobic test, *Pseudomonas aeruginosa* 5778.
antibiotic sensitivity testing, disc-diffusion test, *Pseudomonas aeruginosa*,
 statistical analysis 479.
antibiotic sensitivity testing, *Proteus penneri* 9162.
antibiotic sensitivity testing, *Pseudomonas aeruginosa* 3079.
antibiotic synergism, cefotaxime, *Streptococcus* 1382.
assays, comparison 525.

- ± nafcillin, bactericidal activity, *Staphylococcus aureus*, serum assays,
 treatment, endocarditis, rabbits 478.
production, culture conditions, *Streptomyces cremus* subsp. *tobramycin* 4064.
rifampin + ticarcillin, antibacterial activity 8357.
serum levels, assays comparison, man 3106.
serum levels, bioassays, *Escherichia coli* 4666.
Streptomyces cremus subsp. *tobramycin*, biosynthesis, media nutrients 2313.

Tobravirus

- infection, *Fraxinus mariesii*, characterization 1238.

Togavirus

- antiviral activity, synergism, selenazofurin, tiazofurin, ribavirin 9117.

Tolium chloride

- staining, bacteria 5922.

Toluene

- biodegradation, plasmids, genetic analysis, reviews 8284.

Tolulic acid

- biodegradation enzymes, *Alcaligenes eutrophus* 4422.

4-Tolyldimethylsulfone

- paints, antifungal activity 1289.

Tolypocladium inflatum

- cyclosporin A biosynthesis pathway 7780.

- cyclosporin A, cyclosporin H, synthesis 8625.

Tolypoporum ehrenbergii

- lipid production, carbon sources, nitrogen sources 1850.

- lipid production, factors affecting 5250.

Tomatidine

- biodegradation, *Gymnoascus reesi* 7839.

Tomato bushy stunt virus

- RNA cleavage, infectivity, *Lycopersicon esculentum* 2013.

Tomato golden mosaic virus

- infection, *Nicotiana benthamiana*, DNA, supercoiling, isolation, methodology 6279.

Tomato leaf curl virus

- infection, *Bemisia tabaci*, disease transmission, *Lycopersicon esculentum*,
 association, environmental factors 8022.

Tomato mosaic virus

- infection, Capsicum, identification 8828.

- leaves histopathology, *Data metul*, *Nicotiana tabacum* 7168.

- strains, etiology, *Lycopersicon esculentum* ring spot, USA, California 8842.

Tomato ringspot virus

- disease reservoirs, *Taraxicum officinale*, vectors, *Xiphinema*, stem pitting,
 Prunus persica, USA, Pennsylvania 8811.

- distribution, *Malus pumila* leaves, bark, roots 7994.

- hosts, weeds 3818.

- infection, *Prunus domestica*, *Prunus cerasifera*, *Prunus persica* 7997.

- infection, *Prunus persica*, detection, enzyme-linked immunosorbent assay 3813.

- infection, susceptibility, hybrids, rootstocks, *Prunus domestica* × *Prunus*
 persica, *Prunus domestica* × *Prunus cerasifera* 4528.

- Xiphinema californicum*, role, disease transmission, *Prunus* 4529.

Tomato spotted wilt virus

- infection, *Lycopersicon esculentum*, cytokinins content 4567.

Tomato yellow leaf curl virus

- plant diseases, *Lycopersicon esculentum*, cytology 4542.

Tomato yellow mosaic virus

- infection, *Lycopersicon esculentum*, effects on metabolism 6265.

Tomato yellow top virus

- antigenic relationship, potato leaf roll virus, beet western yellows virus,
 infection, *Lycopersicon esculentum*, *Solanum tuberosum* 8847.

- physicochemical properties, disease transmission, *Myzus persicae*, host range,
 Solanales 7180.

Tomatoes

- canning, sterilization, *Bacillus licheniformis*, spores 7033.

- food processing effects on food contamination, bacteria 6984.

- post-harvest decay, disease control, antifungal activity, sodium dodecylbenzene
 sulfonate 8054.

- post-harvest decay, *Geotrichum*, fungicides, disease control 1168.

- post-harvest decay, *Mucor*, disease control 5472.

Tombeuvirus

- plant diseases, *Lycopersicon esculentum*, *Perla* 4540.

Torilis japonica

- biological control, galls, leaves, *Protomyces macrosporus* 8029.

Torolopsis aspherica

- single-cell protein, whey fermentation 1720.

Toromycin

- identification, physicochemical properties 6580.

Torolopsis bombicola

- glycolipids production 5221.

- production, surfactants, glycolipids 1846.

Torolopsis bovina

- single-cell protein, whey fermentation 1720.

Torolopsis candida

- culture, use, palm oil, single-cell protein production 2553.

- rubeomycin B biosynthesis, rubeomycin A transformation 1415.

Torolopsis ethanolicitarsans

- single-cell protein, production, ethanol utilization, potassium nutrient
 requirements 3409.

- single-cell protein production, industrial wastes, distilleries 865.

Torolopsis glabrata

- clinical isolates,

- 1-(4-chlorophenoxy)-3,3-dimethyl-2-(1,2,4-triazole-1-yl)methylbutan-2-ol,

- 1-(4-chlorophenoxy)-1-(1-imidazolyl)-3,3-dimethyl-2-butanol hydrochloride,

- antifungal activity 4756.

- fatty acid composition, gas chromatography 836.

- germ tubes detection, API test 2528.

Torolopsis utilis

- single-cell protein, lysine bioavailability 1730.

- single-cell protein, nutrient availability, juveniles, cattle 1921.

Tosylhydrazones

- reduction, association, macrocyclic antibiotics, derivatives, synthesis 3174.

Toxic shock syndrome

- cytokines, biosynthesis, inhibition, clindamycin 7116.

- Staphylococcus aureus* toxins, biosynthesis, purification 3752.

- Staphylococcus aureus*, toxins markers, detection methodology 1084.

Toxicants

- effects on microorganisms metabolism, aquatic communities, measurements
 methodology 1535.

- industrial wastes, waste treatment, use, biotechnology, methodology 8398.

- waste water, wastewater treatment, use, bacteria, methodology 6399.

Toxicity

- Ageratum houstonianum* essential oils, *Microsporum gypseum* 5505.

- amphotericin B, *Candida albicans* 4859.

- Bacillus thuringiensis*, *Aedes aegypti*, *Culex molestus*, larvae, biological control
 8647.

- Bacillus thuringiensis* subsp. *israelensis* proteins crystals, *Aedes aegypti* larvae,
 solubilization methodology 1859.

- cephalosporins, antibacterial activity, pharmacokinetics, reviews 5767.

- copper, *Bacillus megaterium*, siderophores enhancement 6444.

- copper, *Neurospora crassa* 1312.

- metals, effects on soil microorganisms biomass 8255.

- permethrin derivatives, soil microorganisms, fungi 2174.

- N-(phosphonomethyl)glycine, fosamine ammonium, hexazinone, soil microorganisms
 2175.

- phytotoxins, soil microorganisms composition, *Malus pumila* rhizosphere 2146.

- wood, preservatives, diffusion, fungi 1251.

Toxicity testing

- aquatic environment pollutants, bioassays, luminous bacteria 1601.

- bioassays, activated sludge respiration, chemical pollution 543.

- chick embryos, ε-toxin, *Clostridium perfringens* 8736.

- Clostridium sporiforme* enterotoxins, characterization, purification 4481.

- safety regulations, food industry, enzymes, microorganisms 44.

- soil microorganisms, dissolved oxygen uptake, resazurin test 398.

- Trichosporon cutaneum*, single-cell protein, rats 1915.

Toxicogenicity

- correlation, *Clostridium difficile* plasmids 1372.

- counter immunoelectrophoresis, *Corynebacterium diphtheriae* 7900.

- Escherichia coli*, antibiotic resistance relationship 6424.

T toxin

- Helminthosporium maydis*, mitochondria, calcium transport inhibition, *Zea mays*
 7155.

- Helminthosporium*, *Zea mays* susceptibility, reviews 1123.

T-2 Toxin

- antibodies association, production, use, detection, food contamination, serum
 levels, reviews 7082.

- bioassays, growth, larvae, *Mamestra configurata* 3731.

- biosynthesis, *Fusarium tricinum*, isolation, *Festuca arundinacea* 7059.

- books 5939.

- detection, media (culture), *Fusarium*, methodology 3748.

- diacetoxyscyrpeneol, feeds contamination, feeding behavior, chickens 7898.

- electrophoretic mobility, fungi 5376.

- fluid, liquid chromatography assays, *Triticum aestivum*, *Secale cereale* 3739.

- Fusarium acuminatum*, biosynthesis, sorbic acid, stimulation 2761.

- Fusarium*, detection, grain, Egypt 7069.

- Fusarium sporotrichoides*, detection, *Zea mays*, enzyme-linked immunosorbent assay
 5365.

- incidence, wheat 1927.

α-Toxin

- Staphylococcus aureus*, detection, enzyme-linked immunosorbent assay methodology
 4186.

β-Toxin

- Bacillus thuringiensis*, propagation, whey recycling methodology, biological
 control, insects 6899.

ε-Toxin

- toxicity testing, chick embryos, *Clostridium perfringens* 8736.

Toxin B

- Streptococcus pyogenes*, purification, characterization 1956.

- X-ray crystallography, *Staphylococcus aureus* 8214.

Toxin C

- Streptococcus pyogenes*, purification, characterization 8752.

Toxins

- Alternaria, host-pathogen interactions, plant diseases, reviews 5393.

- amino acid sequence, nucleotide sequence, genes, *Corynebacterium diphtheriae*
 7119.

- amino acid sequence predictions, use tox gene nucleotide sequence,
 Corynebacterium diphtheriae 7912.

- Bacillus sphaericus*, genes, gene expression, use biological control 8628.

- Bacillus thuringiensis* subsp. *israelensis*, biological control, *Culicidae*, toxicity
 7790.

- Bacillus thuringiensis*, toxicity, comparison peptide antibiotics, larvae, *Aedes*
 aegypti 2661.

- bioassays, *Pasteurella multocida* 8761.

- biosynthesis, growth rate, *Clostridium perfringens*, *Clostridium botulinum* 1951.

Toxins, (continued)

- biosynthesis, plant diseases association, *Pseudomonas syringae* 6209.
Campylobacter fetus, *Campylobacter coli*, characterization 3761.
Cercospora beticola, inhibition, *Pisum sativum*, proteins, uptake 7122.
 characterization, *Corynebacterium ulcerans*, *Corynebacterium pseudotuberculosis* 3757.
Clostridium botulinum, inhibition, iron chelating agents, nitric oxide, carbon monoxide, pork, minced meat 7035.
Clostridium botulinum, production, bacon contamination, radiation effects on 7039.
Clostridium botulinum type E, production, steam pasteurization, freezing, seafood, *Crassostrea virginica* 5364.
Clostridium botulinum, vegetables, canned food 3719.
Clostridium difficile, antibodies, detection, enzyme-linked immunosorbent assay 230.
Clostridium difficile, detection, feces, enzyme immunoassay 6216.
Clostridium difficile, detection, identification, media (isolates) 229.
Clostridium difficile, detection, McCoy cells monolayers use 4478.
Clostridium difficile, physicochemical properties, biological properties 7111.
Clostridium tetani, production, fermenters, association vaccines 2321.
Clostridium tetani, purification, characterization 7907.
Cornarius, characterization 1950.
Cornarius, high-performance liquid chromatography 3741.
Corynebacterium diphtheriae, conformation association acids, sodium chloride effects on, fluorescence 5388.
Corynebacterium diphtheriae, synthetic peptides, combined vaccines.
 Streptococcus, hepatitis B surface antigen, antibody response, mice 9219.
Corynebacterium rathayi, production, infection, cancer, pasture, *Lolium perenne* 6215.
 detection, bioassays, *Clostridium difficile*, antisera, adsorption 5382.
 food poisoning, bacteria, inactivation, cooking temperature, stuffing, poultry 5349.
 formation, *Clostridium botulinum*, inhibition, fumaric acid esters, canned food, bacon 7034.
Fusarium, detection, grain, Egypt 7069.
Fusarium oxysporum f.sp. *medicaginis*, disease resistance, polyploidy, cell lines regeneration, *Medicago sativa* 5494.
Fusarium solani, *Allium cepa* root rot 2028.
Hansenula marmill, purification, characterization 7114.
 hydrogen bonding, N.M.R., I.R., spectroscopy, *Helminthosporium carbonum* 7911.
 Hypoxylon marmill, effects on *Populus tremuloides*, pathogenicity 7233.
 inhibition growth rate, ethanol fermentation, yeasts 2679.
 lactam analogs, peptide synthesis, *Altmaria* mail 3736.
 markers, toxic shock syndrome, *Staphylococcus aureus*, detection methodology 1084.
 microorganisms, phytotoxins, reviews 3756.
 peptide synthesis, biological activity, *Amanita virosa* 7906.
 Phyllosticta maydis, structure 1952.
 plants, effects on biodegradation, microorganisms 8970.
 precursors biosynthesis, genetic control, *Bacillus thuringiensis* 4487.
 production, *Clostridium botulinum*, sodium nitrite, + potassium sorbate, + sodium acid pyrophosphate, frankfurters 7021.
 production, *Staphylococcus aureus*, growth, sodium chloride effects on 8760.
 productions, *Bordetella pertussis* 4483.
 protection antigens, genes, *Bacillus anthracis*, cloning 1083.
 purification, characterization, *Pasteurella multocida* 7118.
 purification, chromatography, *Corynebacterium diphtheriae* 3750.
 purification, *Corynebacterium diphtheriae* 4689.
 purification, production, *Clostridium difficile* 4484.
 Shigella dysenteriae like, *Escherichia coli*, purification, characterization 6211.
 Shigella dysenteriae like, toxins, *Vibrio cholerae*, *Vibrio parahaemolyticus* 3758.
Staphylococcus aureus, toxic shock syndrome, biosynthesis, purification 3752.
Staphylococcus pyogenes, isoelectric focusing, mitogenicity 2764.
 structure, *Cornarius*, nucleoside 8734.
Vibrio cholerae, genes, nucleotide sequence, deletion mutant analysis, vaccines development 2327.
Vibrio cholerae, A1-subunit, ADP-ribosylation sites, amino acid sequence 1085.
Vibrio cholerae like, *Campylobacter*, genes probes 5389.
Vibrio cholerae like, *Campylobacter jejuni* production 6210.
Vibrio cholerae, peptide synthesis, toxoids conjugate, antisera production, vaccines 4078.
Vibrio cholerae, reviews 2768.
Vibrio cholerae, synthetic antigens, vaccines 6654.
 victorin, purification, high-pressure liquid chromatography, U.V. spectroscopy, *Bipolaris victoriae* 7910.
 victoridine derivatives, isolation, N.M.R., *Helminthosporium victoriae* 3733.
- Toxoids,**
Clostridium tetani, adjuvants, *Corynebacterium diphtheriae* synthetic peptides, antigenicity, vaccines, mice 6656.
Clostridium tetani, conjugation *Neisseria meningitidis* lipopolysaccharides, antibody response, vaccines, rabbits 1453.
Corynebacterium diphtheriae, + *Haemophilus influenzae* polysaccharides, combined vaccines, immunogenicity, rabbits 6655.
 immunogenicity, correlation purification methodology 4891.
Pseudomonas aeruginosa, production, genetic analysis, immunogenicity 540.
 purification, *Corynebacterium diphtheriae* toxins 4889.
 purification, immunogenicity, *Corynebacterium diphtheriae* 4892.
Vibrio cholerae, conjugate, toxins, peptide synthesis, antisera production, vaccines 4078.
- Toxorynchites,**
 larvicides, pathogens, *Bacillus sphaericus*, *Bacillus thuringiensis* 1841.
- Toxorynchites amboinensis,**
 cells, cell culture, dengue virus, methodology 639.
- Toxze alpina,**
 leaves, symbionts, bacteria, actinomycetes, ectomycorrhizas 8204.
- Trachyloban-19-0ic acid,**
 isolation, *Helianthus annuus*, antibacterial activity, *Staphylococcus aureus*, *Mycobacterium smegmatis* 4009.
- Trains,**
 bathrooms, airborne microorganisms analysis 579.
- Trametes versicolor,**
 biodegradation, coconut fibers, Ascomycetes, Deuteromycetes, effects on 1031.
- Transcription,**
 cell-free systems, books 842.
- Transfection,**
 hepatitis B surface antigen, animal cells, vaccines production, hepatitis B virus 6594.

Transfection, (continued)

- mammalian cells, use papilloma virus (bovine) cloning vectors 629.
 phase M2 DNA, *Penicillium islandicum* islandic acid effects on 9120.
 SV40, DNA, Vero cells, methodology 5000.
- Transferase,**
 activity, oxalacetate decarboxylase α -chains, membrane proteins, *Klebsiella aerogenes* 1791.
- Transformation,**
 amino acids overproduction mutants, *Brevibacterium lactofermentum* 5116.
 α -amylase purification, characterization, mutants, *Bacillus subtilis* 4287.
Bacillus licheniformis plasmid pLP11, gene expression, β -lactamase, *Bacillus stearothermophilus* 8543.
Bacillus sphaericus, protoplast fusion, plasmid pUB110, plasmid pBC16, sporulation, biological control, *Culicoides* 2666.
 carbohydrates, immobilized cells 2724.
 Cellulomonas fimi cellulase genes, host systems, *Escherichia coli* 6018.
 centromeres DNA, isolation methodology, gene libraries, *Saccharomyces cerevisiae* 820.
 cloning vectors, lactose lac gene, *Streptococcus lactis* 6991.
Escherichia coli, malic acid assimilation, malolactic fermentation, *Leuconostoc oenos* 3627.
 methodology, yeasts 816.
 methodology, yeasts 817.
 v-mos gene proteins, inhibition, immunoglobulin G antisera, vaccines models, Moloney sarcoma virus 6648.
 Neisseria gonorrhoeae, methodology, infection detection, clinical isolates 727.
 plasmid pLZ64, *Penicillium*, 5-phospho- β -D-galactosidase, lactose metabolism, *Lactobacillus casei* 5345.
 plasmid pT11, association, mining, *Thiobacillus* 8262.
 plasmids, drug resistance, *Escherichia coli* 7337.
 protoplasts, plasmids DNA, gene transfer, *Corynebacterium glutamicum* 6059.
 yeasts, books 842.
 yeasts cytochrome c CYP1 gene, *Escherichia coli* 819.
- Transformed cells,**
 herpes simplex virus, interferon effects on 462.
- Transgrow media,**
 use, ammonium bicarbonate, comparison, carbon dioxide, *Neisseria gonorrhoeae* isolation 3288.
- Transition metals,**
 chelates, affinity chromatography, proteins purification 3430.
- Translation,**
 cell-free systems, books 842.
 cell-free systems, preparation, *Saccharomyces cerevisiae* 821.
 polyribosomes, activity, *Hordeum vulgare* leaves, *Erysiphe graminis* f.sp. *hordei* infects 251.
- Translocation,**
 fusicoicin, *Fusicoicum amygdali* infection, *Prunus amygdalus* 8809.
 nitrogen fixation, vascular system, Glycine max, *Rhizobium japonicum* 2956.
- Transmissible gastroenteritis virus,**
 antiviral activity, isothiazone 1344.
 glycoproteins, vaccines production 6661.
- Transmission,**
Bacillus contamination, blood culture, rope, cotton use disinfection 3223.
 potato virus S, cutting instruments, *Solanum tuberosum*, greenhouses, crop flies 8008.
 rabdovirus, *Ribautodelphax notabilis* role, Gramineae, Iran 262.
 stunt *Spiriplasma*, *Euscelidius variegatus* vectors, *Sinapis alba*, *Pisum sativum*, *Rhaphanus sativus*, *Spinacia oleracea* 8030.
- Transmission electron microscopy,**
Arthrobacter oligosporus, predator-prey interactions, *Nematoda* 2125.
- Transmission (mechanical),**
 dandelion yellow mosaic virus, *Lactuca sativa*, *Taraxacum officinale* 2043.
- Transmission (seed),**
Ascomycetes conophialium infection, *Festuca arundinacea* 8790.
 blight, *Gossypium barbadense*, *Gossypium hirsutum* 8037.
 brome mosaic virus, detection, immunodiffusion, enzyme-linked immunosorbent assay, immunoelectrophoretic, seeds, *Triticum aestivum* 8787.
 Erwinia soft rot, *Solanum tuberosum* 8870.
 Marssonina brunnea infection, *Populus* 2113.
 peanut mottle virus, seeds screening, enzyme-linked immunosorbent assay, *A. hypogaea* 8769.
 prunus necrotic ringspot, *Prunus spinosa*, characterization 8003.
 seed-borne diseases, *Didymella bryoniae*, *Cucurbitaceae* 8036.
- Transmission (vertical),**
 cherry leaf roll virus, virus-like particles, localization, pollen, anthers, *Prunus avium*, *Betula pendula*, *Juglans regia* 7990.
- Transpiration,**
 water conductivity, vesicular-arbuscular mycorrhizas, *Citrus* 8216.
- Transplantation,**
 survival, seedlings, ectomycorrhizas inoculation, *Pinus caribaea* 5569.
- Transposition,**
 antibiotic resistance, gentamicin, plasmids, *Staphylococcus aureus* 9066.
 transposon γ containing cloning vectors 758.
- Transposons,**
 antibiotic resistance gene transfer, tetracycline, conjugation, *Streptococcus* 6431.
 transposon γ containing cloning vectors, transposition 758.
 transposon Tn10, repressors, binding sites, genetic control, tetracycline, antibiotic resistance, *Escherichia coli* 1315.
 transposon Tn5, mediation, streptomycin, antibiotic resistance, *Escherichia coli*, *Rhizobium meliloti* 7336.
 transposon Tn5, streptomycin, kanamycin resistance genes, hybridization and gene expression, *Escherichia coli*, *Rhizobium meliloti* 442.
 transposon 10, association, tetracycline, antibiotic resistance, *Haemophilus parainfluenzae*, homology, *Escherichia coli* 9073.
- Traveller's diarrhea,**
Escherichia coli clinical isolates, enterotoxins detection, Biken test 1938.
 pathogens, media (transports), isolation, methodology 9309.
- Trees,**
 crown gall, *Agrobacterium tumefaciens*, characterization 5583.
 ectomycorrhizas, conferrences 5945.
 ectomycorrhizas inoculation, methodology, reviews 831.
 ectomycorrhizas inoculum production, methodology, reviews 830.
 ectomycorrhizas, research programs, forestry 5550.
 inoculum, culture, ectomycorrhizas 5927.
 inoculum efficacy, immobilized cells, ectomycorrhizas 8163.

Trees, (continued)

- mycorrhizas, books 3381.
- ornamental plants, diseases, books 840.
- phosphate, nutrient uptake, physiology, colonization, roots 5554.
- response association ectomycorrhizas inoculation, environmental effects, reviews 350.
- response association ectomycorrhizas inoculation, factors affecting, reviews 349.
- roots colonization, inoculum potential, competition, ectomycorrhizas 5563.
- roots, ectomycorrhizas colonization, environment factors 5551.
- shoots culture, antibiotics decontamination, gram-negative bacteria 5762.
- Uncinula, host-pathogen interactions, isolation, morphology 8191.

 α -Trehalase,

- hydrolysis, substrate specificity, *Trichoderma reesei* 4326.

Trehalose,

- bioaccumulation, streptomycin production, *Streptomyces griseus* 4848.

Trehalose dicorynomycolate,

- Rhodococcus erythropolis*, biosynthesis intermediates 978.

Tremorgens,

- mycotoxins, food contamination, Zea mays, intoxication, cattle 6205.

Tropenoma,

- FTA-ABS test, methodology, comparison 8463.

Tropenoma hydrosenteriae,

- 3-[alkylthio]methyl]quinoxaline 1-oxide derivatives, antibacterial activity 4741.

Tropenoma hydrosenteriae,

- antibacterial activity, antibiotic X-14885A 1442.

Tropenoma hydrosenteriae,

- dysentery, prophylaxis, treatment, pyrantel tartrate, + tylosin, + lincomycin, feeds, pigs 1918.

Tropenoma pallidum,

- antigens, use, enzyme-linked immunosorbent assay, methodology 2508.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Tropenoma pallidum,

- syphilis, diagnosis, use, toluidine red serum tests, man 2511.

Tropenoma pallidum,

- syphilis, immunodiagnosis, hemadsorption 2500.

Tropenoma pallidum,

- susceptibility, oxygen-reduction products, in vitro 5457.

Trichoderma, (continued)

- cellulase, biodegradation, man-made lignocelluloses 2711.
 - cellulase, kinetics cellulase hydrolysis 85.
 - cellulase production, screening projects 6883.
 - cellulolytic enzymes activity 6871.
 - cellulolytic enzymes production, use bagasse 6023.
 - cellulose hydrolysis, glucose formation, kinetics mathematical models 1798.
 - composts, suppression, damping-off, *Rhizoctonia solani*, *Raphanus sativus* 290.
 - fermentation, cellulose, hemicellulose, cellulase activity 3622.
 - growth, contamination, taints production, corks, wine 7798.
 - parasitism, phytopathogenic fungi biological control, ultrastructure 1213.
 - pectinesterase, catalysis pectin 8595.
 - soil isolation, media (selective) 797.
 - spores, thermal injury, preservatives effects on, germination, growth 1072.
 - volatile, biological control, *Basidiomycetes* 7245.
- Trichoderma album,**
- single-cell protein production, sugar beets fermentation 1716.
- Trichoderma hamatum,**
- growth, spore germination, antifungal activity, metham, soil fumigation 8924.
 - parasitism, phytopathogenic fungi biological control, ultrastructure 1213.
- Trichoderma harzianum,**
- biological control, *Pythium aphanidermatum*, plant diseases 4589.
 - biological control, *Sclerotium roffii*, plant diseases, *Helianthus annuus* 4586.
 - biological control, soil inoculum 8918.
 - carriers, biological control, *Rhizoctonia solani* 8919.
 - cellulase, lignocelluloses hydrolysis, factors affecting 1892.
 - enhancement, growth, *Raphanus sativus*, controlled conditions, association, experimental methods 8228.
 - growth, spore germination, antifungal activity, metham, soil fumigation 8924.
 - lignocelluloses hydrolysis, cellulase activity, ethanol production 5274.
 - parasitism, phytopathogenic fungi biological control, ultrastructure 1213.
 - single-cell protein, cellulase, production, *Oryza sativa* straw utilization 3725.
 - trichorizanne A1, N.M.R. 1414.
 - trichorizanne A1, crystallization, X-ray diffraction 1727.
 - use, biological control, *Pythium seed rot*, *Pisum sativum* 2779.
- Trichoderma konigii,**
- bioreactors, cellulose hydrolysis, comparison 4441.
 - cellulase, cellulose hydrolysis, reactors 7736.
 - hydrolysis, alcohol chloroacetates enantiomers 2709.
 - use, biological control, *Pythium seed rot*, *Pisum sativum* 2779.
- Trichoderma longibrachiatum,**
- bioreactors, cellulose hydrolysis, comparison 4441.
 - cellulase, cellulose hydrolysis, bioreactors 4355.
 - cellulase, cellulose hydrolysis, reactors 7736.
 - cellulase, hydrolysis, cellulose, melanin effects on 8530.
 - cellulase purification methodology, affinity chromatography 882.
 - cellulose hydrolysis, cellulase 6040.
 - β -D-glucosidase, characterization 4346.
 - β -D-glucosidase purification 5981.
 - β -D-glucosidase, purification, characterization 4342.
 - β -D-glucosidase, purification, characterization 7744.
- Trichoderma reesei,**
- aspartic proteinase isoenzymes, purification, characterization, cellulase hydrolysis 87.
 - catabolite λ -expression, resistant mutant, cellulase, production, screening, media (enrichment) 1797.
 - cellulase, bagasse hydrolysis, sugars production 1808.
 - cellulase, biodegradation, *Daucus carota* 8538.
 - cellulase biosynthesis, ATP levels 3506.
 - cellulase, cellulose hydrolysis 6024.
 - cellulase, cellulose hydrolysis, microfibrils formation 3472.
 - cellulase, *Coccoloba* crop residues cellulose hydrolysis 8678.
 - cellulase, crop residues fermentation, production, butanol, acetone, *Clostridium acetobutylicum* 7832.
 - cellulase, digestion (anaerobic), food processing wastes, methanogenesis, *Beta vulgaris* 6691.
 - cellulase, endo-1,3- β -D-xylanase, production, activity 3496.
 - cellulase, fermentation, crop residues, ethanol production, *Maius* 3623.
 - cellulase, genes, cloning 3498.
 - cellulase, hemicellulase, hydrolysis, lignocelluloses 7833.
 - cellulase, +hydrogen peroxide, ethanol production, lignocelluloses fermentation 5303.
 - cellulase, hydrolysis, hardwoods, glucose production 5160.
 - cellulase, hydrolysis, lignocelluloses, cell walls, steam disruption 5278.
 - cellulase, lignocelluloses hydrolysis, solvents pretreatment 8536.
 - cellulase, lignocelluloses hydrolysis, sugars, assays, 2,4-dinitrosalicylic acid 8680.
 - cellulase, multienzyme complexes, purification, characterization 1751.
 - cellulase production 3492.
 - cellulase production, ATP levels 4334.
 - cellulase production, immobilized cells 3446.
 - cellulase production, immobilized cells 6021.
 - cellulase recovery, cellulose 6022.
 - cellulase yield, mutants selection, nystatin resistance 60.
 - cellulolytic enzymes, cellulose hydrolysis, sugars, fermentation, ethanol, cost-benefit analysis 5299.
 - cellulolytic enzymes hydrogens peroxide, lignocelluloses, hydrogen peroxide pretreatment 3652.
 - cellulolytic enzymes production 5158.
 - cellulose hydrolysis optimization, bioreactors 3658.
 - clones, cellulase, exo-cellulohydrolase genes, introns excision, methodology 8568.
 - comparison, *Spicellum roseum*, cellulase, production, activity 3497.
 - continuous culture, cellulase, production, characterization 101.
 - digestion (anaerobic), organic acids production, biomass 3417.
 - enzymes production, carbon sources, media (culture) 1803.
 - exo-cellulohydrolase, amino acid sequence 3510.
 - exo-cellulohydrolase, cellulase, amino acid sequence, homology 3509.
 - exo-cellulohydrolase isoenzymes, purification, affinity chromatography 6867.
 - filters, recovery, cell culture, biotechnology 7635.
 - β -D-galactosidase production, continuous culture 8541.
 - hydrolase, multienzyme complexes, isoelectric focusing 8572.
 - lignocelluloses hydrolysis, cellulase activity, ethanol production 5274.
 - mixed culture, *Aspergillus wentii*, media (culture) association production, cellulase, hemicellulase 1736.
 - mutants selection, cellulase, endo-1,3- β -D-xylanase,

Trichoderma reesei, (continued)

- endo-1,3- β -D-glucanase 1750.
- mycelia, cellulase, β -D-glucosidase induction, activity 4298.
- penicillium, *Thielavia terrestris*, sporotrichum cellulophilum, cellulase, physicochemical properties, sporotrichum cellulophilum, cellulase, radiation polymerization, immobilized cells, cellulase hydrolysis, sawdust 6949.
- strains development, cellulase, gene expression, production 7738.
- α -D-trehalase, hydrolysis, substrate specificity 4326.

Trichoderma viride,

- biodegradation, *Sporotrichum pulverulentum* food processing wastes, proteins production 871.
- biodegradation, wool, control, biocides 1288.
- biological control, decay fungi, *Fagus sylvatica*, field trials 5587.
- biological control, soil inoculum 8918.
- bioreactors, cellulase hydrolysis, comparison 4441.
- cellulase, acids, biodegradation, *Triticum aestivum*, straw 6166.
- cellulase, adsorption, cellulase 1802.
- cellulase biosynthesis, nitrogen sources 3508.
- cellulase biosynthesis, nitrogen sources effects on 883.
- cellulase, cellulose hydrolysis, bioreactors 4355.
- cellulase, cellulose hydrolysis, pretreatment, zinc chloride, hydrochloric acid 3656.
- cellulase, cellulose hydrolysis, reactors 7736.
- cellulase, hydrolysis, cellulose, peracetic acid, sodium hydroxide, phosphoric acid, effects on 188.
- cellulase purification methodology, affinity chromatography 882.
- cellulase samples, containing activity, carboxymethylcellulase, endo-1,3- β -D-xylanase 8533.
- cellulose hydrolysis, cellulase 6040.
- cellulose, hydrolysis, microwave radiation pretreatment, bagasse, straw, *Oryza sativa* 5128.
- detection, oxidase extracellular enzymes 1799.
- endo-1,3- β -D-glucanase, endo-1,6- β -D-glucanase, chitinase, biosynthesis 920.
- extracts, biological control, *Phytophthora parasitica* var. *piperina* rot, *Piper bette* 5518.
- +fungicides, integrated control, inhibition *Chondrostereum purpureum* spore germination, silver-leaf disease, pruning wounds, *Prunus domestica* 5588.
- +fungicides, use, disease control, *Pythium ultimum* damping-off, *Fusarium solani* f.sp. *pisae* root rot, *Pisum sativum* 3358.
- growth, heterotrophy, acid rain effects on, soil 2940.
- growth, spore germination, antifungal activity, metham, soil fumigation 8924.
- lysine 2-monooxygenase, immobilized enzymes, electrodes, use, assays, L-lysine, fermenters 38.
- nontarget organisms, toxicity, synergism, microorganisms 459.
- single-cell protein production, fermentation, industrial wastes, oilseed crops, *Olea europaea* 5114.
- spore germination, carbendazim, treatment, effects on, *Saccharum officinale* 8127.

Tricholomopsis platyphylla,

- soil, mycelia growth, development 401.

Trichomonas vaginalis,

- liquid culture media, *Candida* comparison, isolation 8482.

Trichophyton,

- agar, *Trichophyton soudanense* identification methodology 1672.

Trichophyton ajelloi,

- soil microorganisms, Spain 6336.
- Trichophyton mentagrophytes**,
- antifungal activity, amino acids 9106.
- antifungal activity, N-(benzylthio)carbamate acid aryl esters 2224.
- antifungal activity, sesquiterpenes 8317.
- antifungal activity, 2-methylquinolines 5740.
- conidia, arthrospores, spore germination, germ tubes formation, antifungal activity 5738.
- dose sensitivity testing methodology 5736.
- imidazoles sensitivity, mycelia, arthrospores, conidia 1340.
- plasma membranes, vacuoles formation, antifungal activity, miconazole 9109.
- susceptibility methodology, ketoconazole, miconazole, clotrimazole, griseofulvin 1336.

Trichophyton rubrum,

- dose sensitivity testing methodology 5736.

Trichophyton soudanense,

- identification methodology, *Trichophyton* agar 1672.

Trichoplusia ni,

- biological control, mortality, dose-response effects, mathematical models, bioassays, nuclear polyhedrosis virus 8901.
- biological control, *Normandea rileyi*, pathogens, virulence 8900.
- epidermis cell culture, nuclear polyhedrosis virus replication, inoculum production, biological control 3249.

Trichorzianine A1,

- crystallization, X-ray diffraction, *Trichoderma harzianum* 1727.

Trichosporon,

- N.M.R., *Trichoderma harzianum* 1414.

Trichosporon cutaneum,

- amylolytic enzymes production 8546.
- biodegradation, glucosinol, goitren, rapeseed meals 1042.
- bioreactors, growth conditions 802.
- salicylate 1-monooxygenase, hydroxyquinol 1,2-dioxygenase, characterization 6864.
- single-cell protein, lactose fermentation, ultrafiltration, milk 1719.
- single-cell protein, toxicity testing, mutagenicity testing, rats 1915.
- tryptophan aminopeptidase, purification, characterization 2613.

Trichosporon penicillium,

- biodegradation, lignin, crop residues, *Zea mays* 6950.

Trichosporon pullulans,

- lipids biosynthesis, growth rate, continuous culture 6925.

Trichothecenes,

- biosynthesis, *Fusarium sambucinum*, potatoes 5372.
- books 5939.
- chemical composition, *Fusarium sporotrichiella* 1076.
- detection, *Fusarium* ear rot, *Zea mays* 7083.
- food contamination, corn, *Tetrahymena pyriformis* food screening 7055.
- food contamination, wheat 7098.
- gas chromatography, food contamination, grain, *Hordeum vulgare* 7107.

Trichothecium,

- corn food contamination, screening, use, *Tetrahymena pyriformis* 7055.

Trichothecium roseum,

- roseotoxin B, secondary structure, hydrogen bonding role 8756.

Trichothecium roseum, (continued)

- roseotoxin B, X-ray diffraction, crystal structure, N.M.R. 8755.

Trichoveritron,

- Myrothecium roridum* metabolites new records 1929.

Trickling filters,

- use, microorganisms, air pollution odor control 3200.
- wastewater treatment 4901.
- wastewater treatment, industrial effluents, food industry 4111.

Triclosan,

- antibacterial activity 4011.

Tricyclazole,

- inhibition *Pycnarura oryzae* appressoria, penetration, cell walls, *Oryza sativa* 2092.

Tridemorph,

- disease control, powdery mildew, fertilizer applications, yield, *Hordeum vulgare* 2900.

Trifluoperazine,

- inhibition, chlamydia trachomatis, infectivity, McCoy cells 450.
- role, measles virus budding inhibition 471.

5-(3,3,3-Trifluoro-1-propenyl)-2'-deoxyuridine,

- antiviral activity, herpes simplex virus 1 5747.

Trifluoroacetic acid,

- hydrolysis, *Triticum aestivum* straw hemicelluloses, xylose fermentation, ethanol production, *Pachyosolen tannophilus* 8657.

6- β -(Trifluoromethane sulfonyl)-amidopenicillanic acid sulfone,

- derivatives, inactivation β -lactamase, *Bacillus subtilis* 1780.

Trifluralin,

- dealkylation, soil microorganisms 1041.
- effects on soil microorganisms population levels, crop fields, *Triticum aestivum* 5682.

Trifolium,

- infection, bean yellow mosaic virus, clover yellow vein virus, white clover mosaic virus, host range, field trials 1113.
- nodulation, *Rhizobium leguminosarum* var. *trifolii*, inhibition, metals oxides 7294.
- phosphorus effects on hyphae formation, *Glomus fasciculatum* 8934.
- symbiosis, vesicular-arbuscular mycorrhizas, competition 3935.

Trifolium alexandrinum,

- pathogenicity, *Sclerotinia trifoliorum*, stem rot, inoculum density 2783.

Trifolium ambiguum,

- infection, bean yellow mosaic virus, clover yellow vein virus, white clover mosaic virus, field trials, host range 1113.

Trifolium hybridum,

- gemplasm, infection, bean yellow mosaic virus, clover yellow vein virus 1112.
- infection, bean yellow mosaic virus, clover yellow vein virus, white clover mosaic virus, field trials, host range 1113.

Trifolium incarnatum,

- pathogenicity, stem rot, *Sclerotinia trifoliorum*, inoculum density, *Trifolium subterraneum*, pathogenicity, stem rot, *Sclerotinia trifoliorum*, inoculum density 2783.

Trifolium pratense,

- Fusarium roseum* virulence 1116.
- hail contamination, *Rhizoctonia leguminicola*, swainsonine, mycotoxicosis, horses 8728.
- infection, bean yellow mosaic virus, clover yellow vein virus, white clover mosaic virus, field trials, host range 1113.
- plant breeding, selection, disease resistance, root rot, *Fusarium* 6292.
- powdery mildew, Erysipheae, epidemiology, spectrophotometry 7917.
- seeds, infection, *Sclerotinia trifoliorum* sclerotia 7132.
- silage, proteolysis 1088.
- white clover mosaic virus infection, nitrogen fixation, *Rhizobium symbiosis* 7141.

Trifolium repens,

- disease reservoirs, host alternation, rust, *Phakopsora pachyrhizi* 7940.
- infection, bean yellow mosaic virus, clover yellow vein virus, white clover mosaic virus, field trials, host range 1113.
- infection, viruses, *Rickettsia*, *Mycoplasma*, pathogenesis, Canada 2778.
- nitrogen fixation, fertilizers, nitrogen sources, nodulation 2160.
- nodulation, aluminum toxicity, soils (acid), *Rhizobium leguminosarum* var. *trifolii* 7279.

Trifolium subterraneum,

- nodulation, inoculation, soil chemistry, soil pH effects on, *Rhizobium leguminosarum* var. *trifolii* 7278.
- nodulation, inoculation, strains competition, *Rhizobium leguminosarum* var. *trifolii* 3962.
- nodulation, nitrogen fixation, *Glomus mosseae*+*Rhizobium* inoculation, fertilizers effects on 5628.

Trifolium subterraneum,

- nutrient uptake, inoculum density, vesicular-arbuscular mycorrhizas, *Glomus caledonius*, *Glomus epigaeus* 8214.
- phytopathogenic fungi, pasture 8781.
- protoplasts, detection, *Rhizobium leguminosarum* var. *trifolii*, fluorescence, microscopy 9297.
- protoplasts, *Rhizobium leguminosarum* var. *trifolii* eradication, phages use 8858.
- Rhizobium* nodules survival association calcium oxide pelleting 2950.
- Rhizobium* trifolii infectivity, nodulation, temperature effects on 1282.
- rhizosphere microorganisms, community composition, mixed culture, *Lolium perenne*, *Plantago lanceolata* 372.

Trifolium subterraneum,

- roots, *Glomus fasciculatum* hyphae ultrastructure 381.
- roots, ultrastructure, hyphae, *Glomus fasciculatum* 8226.
- soil microorganisms, inoculation, *Rhizobium leguminosarum* var. *trifolii* 5678.
- symbiosis, nitrogen fixation, *Rhizobium trifolii* populations 409.

Trifolium subterraneum,

- growth, association, phosphorus, *Glomus fasciculatum*, enhancement 2943.
- infectivity, vesicular-arbuscular mycorrhizas, seasonal variations, infectivity phosphate 2144.

Trifolium subterraneum,

- nitrogen fixation, nitrogen-15, acetylene reduction, hydrogen gas production, environmental chambers 2986.
- nitrogen fixation, nitrogen-15, *Rhizobium*, environmental chambers 2985.

Trifolium subterraneum,

- nodules, *Rhizobium trifolii* populations, soil acidity effects on 405.
- plant diseases, *Heterodera daveri*, interaction, *Fusarium avenaceum*, *Fusarium oxysporum* 5411.

Trifolium subterraneum,

- Rhizobium leguminosarum* var. *trifolii* nodulation, *Glomus fasciculatum*, *Glomus mosseae*, effects on 5615.
- Rhizobium trifolii* nodulation, nitrogen fixation, glyphosate soils (soam) applications effects on 2995.

Trifolium subterraneum,

- roots density, colonization, inoculum potential, *Glomus fasciculatum* 8217.
- roots growth rate, infection, models, vesicular-arbuscular mycorrhizas 3933.
- roots, *Heterodera daveri* penetration, *Fusarium avenaceum* filtrates effects on 5524.

- Trifolium subterraneum**, (continued)
soil pasteurization, disease control, damping-off, *Fusarium avenaceum*, *Pythium* 6301.
- Trifolium vesiculorum**,
pathogenicity, *Sclerotinia trifolorum*, inoculum density 2783.
seeds, toxicity, *Rhizobium leguminosarum* var *trifolii* survival 8994.
- Triglycerides**,
xylan, conversion, yeasts, characterization 4402.
- Trigonella foenum-graecum**,
plant extracts, antifungal activity, aflatoxins biosynthesis, *Aspergillus flavus* 789.
- Trigonella polycerata**,
Trigonella striatus rust, India 2036.
- Trihalomethanes**,
removal, carbon (activated) adsorption, biodegradation, water treatment 7501.
removal, ozone + carbon (activated) + biodegradation, water treatment 7497.
water treatment, chlorination, reduction, association, viruses, bacteria, levels 3205.
- Trimethoprim**,
antibiotic sensitivity testing, *Streptococcus faecalis* 4808.
- Trimethoprim**,
antibiotic resistance, *Salmonella typhi*, mediation, plasmids 7322.
antibiotic sensitivity testing, *Branshanella catarrhalis* 9163.
derivatives, antibacterial activity, *Shigella flexneri*, *Shigella sonnei* 1333.
drug resistance, clinical isolates, *Escherichia coli* 7347.
drug resistance, clinical isolates, *Haemophilus influenzae*, *Haemophilus parainfluenzae* 3035.
drug resistance, plasmids, clinical isolates urinary tract, *Escherichia coli* 2234.
drug resistance, *Pseudomonas aeruginosa*, characterization 9079.
drug resistance, rote, tetrahydrofolate dehydrogenase, *Escherichia coli* 6429.
drug sensitivity testing, *Aeromonas salmonicida* 8303.
leukocytes (polymorphonuclear) penetration, antibacterial activity, man 492.
Nocardia asteroides drug sensitivity testing 3090.
use, media (selective), isolation, *Campylobacter fetus* subsp. *jejuni* 1589.
- (2R)-2,6-Trimethyl-1,4-cyclohexadione**,
2,6,6-trimethyl-2-cyclohexene-1,4-dione conversion, *Thermomonospora curvata* 6072.
- 2,6,6-Trimethyl-2-cyclohexene-1,4-dione**,
conversion, (6R)-2,2,6-trimethyl-1,4-cyclohexadione, *Thermomonospora curvata* 6072.
- Trimethylamine-N-oxide reductase**,
Alternanomonas, induction, localization 936.
- N-Trimethylallyl imines**,
use, β -lactam antibiotics synthesis 9208.
- Trimortamid**,
Verticillium albo-atrum resistance 3009.
- Trinidad**,
nitrogen-fixing bacteria, soil 6359.
soil, urea adsorption 7288.
- 2,4,6-Trinitrotoluene**,
biodegradation, bacteria 1005.
biodegradation, composting, soil decontamination 7511.
biodegradation, *Pseudomonas denitrificans*, *Escherichia coli* 4432.
- Tricetin**,
conversion, echinomycin production, protoplasts, *Streptomyces echinatus* 3133.
- Triostin A**,
biosynthesis, N.M.R., bacteria 4066.
+echinomycin, peptide antibiotics complexes, *Streptomyces iveri* 4058.
- Tripeptidyl polyxins**,
transport, plasma membranes, antifungal activity, *Candida albicans* 458.
- Triphenylphosphite**,
inhibition *Uromyces phaseoli* haustoria, rust, *Phaseolus vulgaris* 2899.
- Tria**,
+chlorhexidine digluconate, gram-negative bacteria, association genitourinary tract infection, man 6456.
+EDTA + lysozyme, effects on drug sensitivity testing, antibacterial activity, *Pseudomonas aeruginosa*, animal isolates, horses 2253.
glycerophosphate, use, media (culture), bacteria 7579.
- Trisaccharides**,
synthesis, antigens fragments, *Shigella flexneri* 6050.
- Trisodium phosphonoformate**,
antiviral activity 2230.
- Triticale**,
fungicides, seed treatments, effects on, black point, *Alternaria alternata*, *Triticale* 8930.
plant breeding, disease resistance, loose smut var. *tritici*, *Ustilago nuda* 1183.
- α -**Triticene**,
antifungal activity 6305.
- β -**Triticene**,
antifungal activity 6305.
- Triticum**,
cultivars, wheat streak mosaic virus infection, etiology, incidence, USA, Colorado 7960.
fungicide resistance, *Erysiphe graminis* f.sp. *tritici*, *Puccinia recondita* f.sp. *tritici*, *Septoria nodorum* 1197.
fungicides, field trials, effects on, yield 327.
germplasm analysis, *Septoria tritici* leaf blotch pathogenesis 257.
hybrids, vegetative cells, growth stage, stripe rust disease resistance, inheritance 2886.
plant breeding, *Puccinia striiformis* stripe rust disease resistance, inheritance 5476.
Puccinia rust, LANDSAT, monitoring, epidemics, Pakistan 6246.
root rust disease resistance, inheritance 2885.
x Secale cereale, leaves, stomatal size distribution, *Puccinia recondita* rust incidence 7955.
- Triticum aestivum**,
antifungal activity, alka-2,4-dienal, α -triticene, β -triticene 6305.
Aphididae, honeydew, enhancement, *Septoria nodorum*, *Cochliobolus sativus*, infection 3806.
blotch, *Septoria tritici*, *Septoria nodorum*, incidence, USA, Michigan 5419.
brome mosaic virus infection effects on disease resistance, rust 263.
bunt, *Tilletia foetida*, races, virulence, Pakistan 7965.
by-products, ochratoxin A contamination, detection, high-performance liquid chromatography 5367.
chromosomes location, genes, disease resistance, stripe rust, *Puccinia*
- Triticum aestivum**, (continued)
striiformis 2834.
colonization, vesicular-arbuscular mycorrhizas, soil temperature effects on, USA, Kansas, *Glomus epigaeum*, *Glomus mosseae* 7259.
crater disease, soil fumigation + solar radiation effects on 8120.
crop fields, crop production (no-tillage), soil microorganisms, biomass, nitrogen cycle, nutrient dynamics 5669.
crop fields, fallow land, crop production (no-tillage), soil microorganisms, nutrient cycles 5588.
crop fields, population levels, mycoflora, relationship *Aphelenchus avenae* 8223.
crop fields, trifluralin effects on population levels, soil microorganisms 5682.
crop relations, Zea mays, herbicides effects on soil microorganisms 2929.
cytopathology, histopathology, disease resistance, *Pseudocercospora* herpotrichoides 7976.
disease resistance, brown rust, *Puccinia tritici* 5486.
disease resistance, glume blotch, *Septoria nodorum*, plant breeding 2833.
disease resistance, *Puccinia recondita*, characterization 4578.
disease resistance, *Puccinia recondita* f.sp. *tritici*, factors affecting 3957.
disease resistance, stem rust, *Puccinia graminis* f.sp. *tritici*, recombination, transfer, *Agropyron elongatum* 314.
disease resistance, stem rust, *Puccinia graminis* f.sp. *tritici*, epidemiology, Austria 6244.
disease transmission, brome mosaic virus, urediniospores, *Puccinia graminis* f.sp. *tritici*, *Puccinia recondita* f.sp. *tritici*, stem rust, leaf rust 2789.
dose-response effects, inoculation, barley yellow dwarf virus 8783.
eye spot, factors affecting spore germination, *Pseudocercospora* herpotrichoides 7146.
fungal flora, post-harvest decay 7196.
fungi infection, yield, fungicides disease control, USA, Idaho 7951.
fungi T-2 toxin, HT-2 toxin, liquid chromatography assays 3739.
Gaeumannomyces graminis use induction disease resistance, take-all 2849.
Gaeumannomyces graminis var. *tritici* root rot, pathogenesis 3809.
Gaeumannomyces graminis var. *tritici* take-all, virulence 1126.
disease resistance, transfer, *Aegilops ventricosa*, eye spot, disease resistance 8078.
genotype, disease resistance, pathogenesis, stem rust, *Puccinia graminis* f.sp. *tritici* 8885.
genotypes, leaf rust, powdery mildew, effects on yield, disease resistance, fungi 8098.
germination, black point, *Alternaria alternata*, effects on 8800.
growth, allelopathy, aromatic compounds phytotoxicity, *Pseudomonas*, *Syncephalastrum racemosum* degradation effects on 373.
growth, yield, commercial microorganisms soil amendment effects on 8960.
host-pathogen interactions, roots, agricultural practices, phytopathogenic fungi 3807.
infected cells, barley stripe mosaic virus, detection, localization, immunocytochemistry methodology 4522.
infection, *Coprinus psychromorbidus*, electron microscopy, pathology 7933.
infection, *Fusarium*, *Septoria nodorum*, yield 7948.
inheritance, disease resistance, brown rust, *Puccinia recondita* 2836.
inheritance *Puccinia graminis* stem rust disease resistance 6293.
inheritance, Sr gene, disease resistance, *Puccinia graminis* f.sp. *tritici* 315.
isolation, *Puccinia graminis* races, incidence, geographical distribution, USA, Mexico 1125.
leaf blotch, *Septoria tritici*, disease control, use, antitranspirants 291.
leaf rust disease resistance, genetic control 2054.
leaf rust, *Puccinia recondita* f.sp. *tritici*, disease resistance, Lr 13 gene, genetic control 8069.
leaf rust, stripe rust, disease control, seed treatments, fungicides 2904.
leafspot, *Bipolaris sorokiniana*, disease resistance 5492.
leaves culture, cultivars effects on *Puccinia graminis* f.sp. *tritici* 1991.
lignin biosynthesis, hypersensitive response, stem rust, *Puccinia graminis* f.sp. *tritici* 2055.
lignocelluloses, biodegradation, *Cyathus*, *Crucibulum laeve*, *Nidula nivalis-lomentosa* 6948.
lignocelluloses, biodegradation, white rot fungi 6943.
Mycosphaella graminicola infection, factors affecting pathogenesis 7946.
Neovossia indica bunt, characterization 3808.
Neovossia indica infected, teliospores, isolation, morphology 7984.
nutrient uptake, anions, growth, stimulation, vesicular-arbuscular mycorrhizas 5523.
patch, *Rhizoctonia solani*, surveys, soils (calcareous) 255.
pathology, bunt, *Neovossia indica*, association, loose smut, *Ustilago nuda* var. *tritici* 8799.
pathology, leaf rust, *Puccinia recondita* 7961.
plant breeding, disease resistance genes, host-pathogen interactions, virulence genes, races, *Puccinia graminis*, *Puccinia recondita* 2858.
plant breeding, disease resistance, loose smut *Ustilago nuda*, var. *tritici* 1183.
plant breeding, disease resistance, powdery mildew, *Erysiphe graminis* f.sp. *tritici* 8067.
plant breeding, disease resistance, research programs, Brazil 2878.
plant breeding, disease resistance, rust, research programs 2876.
plant breeding, disease resistance, Zambia 2877.
plant diseases, yield reduction, mathematical models, remote sensing, world 261.
powdery mildew, disease resistance, genetic control 8101.
powdery mildew, disease resistance plant breeding correlation triadimefon disease control, *Erysiphe graminis* 5502.
powdery mildew, *Erysiphe graminis*, incidence, effects on, yield, Bulgaria 7959.
protoplasts lectins, host-pathogen interactions, rust, *Puccinia graminis* f.sp. *tritici* 8092.
Pseudocercospora herpotrichoides eye spot, carbendazim resistance association treatment 8129.
Puccinia graminis f.sp. *tritici* stem rust virulence genes, plant breeding, books 4239.
Puccinia helianthi induction disease resistance, leaf rust, stem rust 293.
Puccinia striiformis stripe rust, USA, Pacific Northwest, models 252.
resistance association *Eriophyes tulipae*, role, disease control, streak 8075.
respiration, relationship, *Pseudocercospora* herpotrichoides eye spot 2795.
response, *Azospirillum brasilense* nitrogen-fixing bacteria, application 3967.
Rhizoctonia cerealis eye spot, effects on yield 1133.
rhizosphere microorganisms, carbon utilization, release 2930.
rhizosphere microorganisms, phosphate-dissolving bacteria, phosphate dissolution 7255.
rhizosphere soil composition, manure effects on 2996.
root rot, disease control, soil amendment, sawdust, oil cake 8088.
roots, respiration (cyanide insensitive), protons pumps, *Irpex pachyodon*,

Triticum aestivum, (continued)

- methy-l-acetylhydroxamoiacetate effects on 8745.
 - seed germination, seedlings, seed-borne fungi, metabolites, effects on 8798.
 - seed-borne diseases, seeds infection, Septoria nodorum 2793.
 - seedlings, disease resistance plant breeding screening projects, wheat mosaic virus 4574.
 - seedlings, glume blotch, Septoria nodorum, factors affecting 7149.
 - seedlings, leaves, Fusarium roseum inoculation, pathogenicity 7151.
 - seedlings, linkage analysis, Puccinia rust 258.
 - seedlings, Septoria nodorum glume blotch, disease resistance components 302.
 - seeds, seed-borne diseases, transmission (seed), brome mosaic virus, detection, immunodiffusion, enzyme-linked immunosorbent assay, immunoelectroblotting 8787.
 - Septoria infection, reviews 1985.
 - Septoria nodorum, sporulation, temperature, growth stage, seasons effects on 5432.
 - Septoria nodorum virulence 7148.
 - soil, manure, effects on, nitrogen fixation 6384.
 - spike, association, Corynebacterium michiganense subsp. tritici, incidence, Anguina tritici 8803.
 - stem rust, association infectivity analysis, Puccinia graminis f.sp. tritici 8750.
 - stem rust, Puccinia graminis, f.sp. tritici, urediniospores, disease transmission, brome mosaic virus 2790.
 - straw, Basidiomycetes pretreatment, lignin biodegradation 1009.
 - straw, biodegradation, actinases, Trichoderma viride, cellulase 6166.
 - straw, composts, thermophilic fungi 6168.
 - straw, eyespot, Pseudocercospora herpotrichoides, spores dispersal, rainfall, wind 1987.
 - straw, fermentation, Chaetium cellulolyticum, single-cell protein production, reactors 1711.
 - straw, fermentation, Phanerochaete chrysosporium Candida utilis, mixed culture, single-cell protein production 1710.
 - straw, hemocelluloses, trifluoroacetic acid hydrolysis, xlyose fermentation, ethanol production, Pachysolen tannophilus 8657.
 - straw, lignocelluloses fermentation, white rot, optimization 1887.
 - stripe, Cephalosporium gramineum, planting dates effects on, yield, USA, Kansas 7974.
 - susceptibility, Pseudomonas plant diseases, roots 6242.
 - take-all, ameba population dynamics, suppression 1173.
 - take-all, Gaeumannomyces graminis var. tritici 7953.
 - take-all, Gaeumannomyces graminis var. tritici, biological control, Pseudomonas fluorescens seed treatments 336.
 - take-all, Gaeumannomyces graminis var. tritici, biological control, Gaeumannomyces graminis var. graminis + Phialophora 5512.
 - take-all, Gaeumannomyces graminis var. tritici, tillage, association, pathology 7977.
 - take-all, manganese deficiency effects on disease resistance, Gaeumannomyces graminis 8099.
 - × Triticum dicoccoides, plant breeding, gene transfer, Puccinia striiformis, stripe rust disease resistance 3860.
 - urea foliar applications effects on rhizosphere microorganisms, respiration 2946.
 - Urocystis agropyri infection, cytology, morphogenesis 4517.
 - varieties, infection susceptibility, Pseudocercospora herpotrichoides 7975.
 - yellow rust, Puccinia striiformis, pathogenesis 4515.
- Triticum dicoccoides,**
- disease resistance, powdery mildew, Erysiphe graminis f.sp. tritici 5415.
 - × Triticum aestivum, plant breeding, gene transfer, Puccinia striiformis, stripe rust disease resistance 3860.
 - × Triticum durum, plant breeding, gene transfer, Puccinia striiformis, stripe rust disease resistance 3860.
- Triticum durum,**
- × Triticum dicoccoides, plant breeding, gene transfer, Puccinia striiformis, stripe rust disease resistance 3860.
 - Woyonvicia graminis infection, Italy 7956.
 - yield, fertilizers, inoculation, nitrogen fixation, Azotobacter chroococcum, Azospirillum brasilense 7277.
- Triticum vulgare,**
- rhizosphere, Saprolegniaceae, Pythiaceae 8220.
- Tritirachium alkaline proteinase,**
- inhibition, tobacco mosaic virus infectivity, Pseudosul vulgaris, Nicotiana tabacum 2806.
- Triton X-100,**
- resistance, penicillin lysis, Streptococcus faecium 8352.
- Tropical environment,**
- feeds production, lignocelluloses, fermentation, silage, Gramineae 5358.
 - forests, vesicular-arbuscular mycorrhizas, mycelia, nutrient uptake 5576.
 - nitrogen fixation, actinorhizas, nitrogen fixation, Casuarinaceae, reviews 2914.
 - plant breeding, disease resistance, long-term effects, crop protection, agricultural ecosystems 1177.
 - plant viruses, plant diseases 1965.
 - rain forests, litter decomposition, soil microorganisms 7224.
 - rain forests, litter decomposition, soil microorganisms 7226.
 - rain forests, mycorrhizas, nutrient cycles 7225.
 - rain forests, organic matter decomposition, fungi 2911.
 - Rhizobium soil isolates, soil temperature tolerance, desiccation, nodulation, Vigna unguiculata 8241.
 - savannahs, ecosystem dynamics, soil microorganisms 2941.
 - semiarid environments, urease, soil microorganisms, soil temperature, soil moisture effects on 8239.
 - soil, media (culture), Rhizobium, interaction, Metarhizium 5634.
 - soil, Rhizobium strains competition, Leucaena leucocephala nodulation 7267.
- Trypsin,**
- inhibitors, Proteus vulgaris, purification, characterization 6810.
 - like, enzymes, characterization, immobilization, Streptomyces 7689.
 - like enzymes, streptomyces giseus, light sensitization, use, electronic equipment 56.
- Tryptophan,**
- Streptomyces erythraeus, histidine residues, role active sites 1757.
- Tryptophan,**
- activity, chorismate mutase, prephenate dehydratase, prephenate dehydrogenase, purification, Candida maltosa 6580.
 - levels, fermentation, temperature effects on, cornmeal, lactic acid bacteria 7881.
 - residues+role, gene 32 protein binding polynucleotides, phase T4 4255.
 - residues, active sites serine residues diolase, fluorescence, bacteria 899.

Tryptophan, (continued)

- residues, exo-1,4- α -D-glucosidase, role activity, Aspergillus niger 7726.
 - residues, fluorescence, lysozyme, disaccharides tetrapeptides binding effects on, phase T4 7706.
 - residues, free radicals chemical malification, role, gene 32 protein binding, DNA, C.D., fluorescence, phase T4 4259.
 - residues, trichloroethanol chemical modification, gene 32 protein, role, binding DNA, phase T4 4256.
 - role, copper active sites, catechol oxidase, fluorescence, Neurospora 5173.
- L-Tryptophan,**
- production, tryptophan synthase, immobilized cells, Escherichia coli 6.
- Tryptophan aminopeptidase,**
- purification, characterization, Trichosporon cutaneum 2613.
- Tryptophan synthase,**
- biosynthesis, Escherichia coli 3504.
 - Escherichia coli, immobilized cells, L-tryptophan production 6.
- Tryptophan 2,3-dioxygenase,**
- purification, characterization, Bacillus brevis 6042.
- Tsuga canadensis,**
- soft rot, Ganoderma tsugae, lignin, degradation 3917.
- Tsuga heterophylla,**
- forests, epidemiology, basidioides spores deposition, airspora, Heterobasidium annosum 8944.
 - mycorrhizas, development, nitrogen, fertilizer applications, effects on 5675.
- Tubakia dryina,**
- Quercus robur branches 7218.
- Tuber melanosporum,**
- ascospores harvesting 3834.
 - ectomycorrhizas, Cistus incanus subsp. incanus, roots, growth 3940.
- Tuberacinomycin,**
- derivatives, palmitoyl/tuberacinamine, antibacterial activity 3160.
- Tubercidin,**
- analogs, antiviral activity 4772.
 - high-pressure liquid chromatography, Streptomyces tubercidicus 4378.
- Tuberculin,**
- purification, characterization 1706.
- Tuberculosis,**
- diagnosis, enzyme-linked immunosorbent assays, man 4200.
 - immunodiagnosis, radioimmunoassay, monoclonal antibodies 3351.
 - infection, laboratories, man 2414.
 - man, sputum containers contamination, Mycobacterium tuberculosis 2417.
 - spiropiperidylflamycin treatment, animal models, new records, antibacterial activity 2282.
- Tubers,**
- Beta vulgaris, sugars fermentation, ethanol production, cost-benefit analysis 8656.
 - disease resistance, Fusarium roseum, dry rot, Solanum tuberosum 8826.
 - enzyme-linked immunosorbent assay detection, potato virus Y, potato virus A, Solanum tuberosum 4538.
 - Erwinia carotovora soft rot, Solanum tuberosum, Chile 2015.
 - extracts, saponins purification, fungi fermentation, Ficus ranunculoides 5222.
 - glycoalkaloids levels, effects on Rhizoctonia solani, disease resistance, Solanum tuberosum 8840.
 - Helianthus tuberosus, fermentation, ethanol production, Saccharomyces cerevisiae, Kluyveromyces fragilis 5297.
 - infection, Erwinia carotovora, Verticillium albo-atrum, Verticillium dahliae, potato virus X, beet western yellows virus, potato leaf roll virus, Solanum tuberosum 8031.
 - soft rot, Erwinia carotovora subsp. atroseptica, soil moisture, soil temperature, Solanum tuberosum 2818.
 - Solanum tuberosum, blackleg, Erwinia carotovora, disease control, heat treatments 1145.
 - Solanum tuberosum, callose growth, disease resistance, haustoria, Phytophthora infestans 2008.
 - Solanum tuberosum, crown gall tumors, indole-3-acetic acid treatment 8874.
 - suberin, esterase depolymerization, Fusarium solani f.sp. sp. infection, Solanum tuberosum 8852.
 - yield, Ipomoea batatas, Elsince batatas scab 8007.
- Tubes,**
- plastics, microorganisms films, drinking water 4948.
- Tuftain,**
- analogs, antibacterial activity, characterization 3120.
- Tulsaella araneosa,**
- nuclear division, mitosis, fluorescence stains, microscopy 9330.
- Tulipae,**
- disease resistance breeding, Fusarium oxysporum f.sp. tulipae bulb rot 299.
- Tumbling,**
- effects on microorganisms, spoilage, ham 7857.
- Tumor-promoting agents,**
- indoleactam V, biosynthesis, actinomycetes 8653.
- Tumorigenesis,**
- Agrobacterium tumefaciens Ti plasmid, Solanum nigrum 2819.
 - plants, pathogens, bacteria, hormones, mediation 8856.
- Tumors,**
- crown gall, asparaginopine, glutaminopine, isolation, Agrobacterium tumefaciens 2810.
 - crown gall, indole-3-acetic acid treatment, Solanum tuberosum tubers 8874.
 - crown gall, plants, induction, role, Agrobacterium tumefaciens cell surface carbohydrates 8768.
 - crown gall, plants, silver nitrate staining 4534.
 - induction, plasmid pTiAg63, plasmid pTiA6, Agrobacterium tumefaciens, comparison, host range 8866.
- Tundra,**
- ecosystem analysis, fungi, soil moisture, seasonal variations, vertical distribution 2129.
 - forests, transitions, alpine environments, ecological distribution, Streptomyces 2101.
 - Salix reticulifolia, ectomycorrhizas, temperature effects on 2103.
- Tungro virus,**
- plant diseases, Oryza sativa, pathogenesis, yield 4514.
- 12-Tungsto zinc acid,**
- antiviral activity, tobacco mosaic virus 9129.
- Tungstoantimoniate,**
- derivatives, rabies virus antiviral activity 4765.
- Tunicamycin,**
- inhibition, cell walls, biosynthesis, effects on, Streptomyces griseus,

Tunicamycin, (continued)

streptomycin, production 2273.

association, streptoviruses, corynetoxins, biological activity, structure 523.

Tupidanthus calyptratus,leafspot, *Alternaria panax* 5450.**Turbidity,**biological control efficacy, *Bacillus thuringiensis* var. *israelensis*, *Aedes aegypti*, *Culex pipiens* 8642.

methodology, hyaluronidase activity determination, bacteria media (culture) 3265.

Turimycin,

binding, serum proteins, cattle 7474.

biosynthesis, respiration, uncouplers, *Streptomyces hygroscopicus* 4872.tur locus, production, role plasmids, *Streptomyces hygroscopicus* 3147.**Turkey,***Drechslera graminea* infection, *Hordeum vulgare*, epidemiology 1987.

fungicides fumigation, use, soil sterilization, disease control, powdery mildew 337.

Turkeys,

carcasses, bacteria contamination, cleaning systems, meat industry 1053.

females, reproduction, feeding regimes, *Fusarium mycotoxins* 3720.

hemorrhagic enteritis virus antibodies detection, gel diffusion, enzyme-linked immunosorbent assay 4153.

Mycoplasma animal isolates, mixed infection detection, growth inhibition test 2449.**Turnip mosaic virus,**disease resistance, plant breeding, germplasm, *Brassica campestris* 8065.infection, effects on brittle root disease, *Spiroplasma citri*, *Armoria rusticana* 8020.mosaic disease, *Raphanus sativus*, pathology 8860.**Turnip rosette virus,**RNA replication, *Brassica rapa* protoplasts 2045.**Turnip yellow mosaic virus,**infection, effects on, starch, accumulation, *Brassica pekinensis* 8863.**Turmps,**

+straw, feeds, digestibility, inhibition cellulolytic bacteria, rumen, cattle 1920.

Tussilago farfara,*Puccinia poarum* infection, pathogenesis, carbon dioxide antifungal activity 8130.**Tween 20,**

neutralization, lauricidin, antibacterial activity 7356.

Tween 80,

+diethylether, +tri-N-butyl phosphate, influenza A virus disruption 4076.

neutralization, lauricidin, antibacterial activity 7356.

Tylactone,biosynthesis, amino acids, carbon sources, *Streptomyces fradiae* 3162.**Tylosin,**intermediates, tylosin biosynthesis pathway, *Streptomyces fradiae* 6574.**Tylopus telaeus,**

fruit bodies, extracts, antifungal activity 9201.

Tylosin,biosynthesis, ammonium inhibition, *Streptomyces fradiae* 3138.biosynthesis pathway, tylocatone intermediates, *Streptomyces fradiae* 6574.

derivatives, structure-activity relationships, antibacterial activity 3166.

drug sensitivity testing, *Bacteroides nodosus* 3056.+pyrantel tartrate, feeds, prophylaxis, treatment, *Treponema hyodysenteriae*, dysentery, pigs 1918.

stability, pH, temperature, effects on 7455.

structure activity relationships, antibacterial activity, ribosomes binding 3172.

Typhoid fever,

diagnosis, Widal test 2479.

isolation, *Salmonella typhi*, antibiotic resistance, biochemical characteristics 3024.*Salmonella*, agglutination, bioassays, diagnosis, methodology, man 667.*Salmonella typhi*, isolation, swabs, sewage effluents, man 6717.**Typhus incanata,**

monokaryons, morphology, infectivity, phytotoxicity, plant diseases 2770.

recombination, dikaryons, monokaryons, infectivity, *Hordeum vulgare* 2788.**Typhus,**

vaccines, purification 3179.

Typing,comparison, sodium dodecyl sulfate+polyacrylamide gels electrophoresis, *Neisseria meningitidis*+clinical isolates identification 2456.

herpes simplex virus, clinical isolates, iododeoxyuridine sensitivity, thymidine kinase antigenic characteristics 594.

Tyrosine,conversion, phenylalanine, immobilized cells, *Pseudomonas* 875.*Flavobacterium*, biosynthesis 1701.hydroxylation, monophenol monooxygenase, role superoxide, *Basidiomycetes* 2594.production, tyrosine phenol-lyase, *Citrobacter freundii* 5.**Tyrosine decarboxylase,**assays, kinetics, *Streptococcus faecalis* 93.**Tyrosine phenol-lyase,***Citrobacter freundii*, production, tyrosine, 3,4-dihydroxyphenylalanine 5.purification, characterization, *Citrobacter freundii* 4289.**Tyrosyl-tRNA synthetase,***Bacillus stearothermophilus*, amino acid sequence homology, methionyl-tRNA synthetase, *Escherichia coli* 2621.X-ray crystallography, structure-activity relationships, site-directed mutagenesis tyrosyl-tRNA synthetase genes, *Bacillus stearothermophilus* 8573.**Tyrosine,**

antibacterial activity, antibiotic resistance 7477.

U.V. Radiation, (continued)

proteolase, fibrolysis role 8583.

mutagenesis, aroma compounds production, dairy starters, *Leuconostoc cremoris* 1906.mutagenesis, cellulase production, nutrient requirements, *Penicillium funiculosum* 8532.mutagenesis, citric acid production, *Aspergillus niger* 1731.mutagenesis, *Thermomonospora curvata*, catabolite repression resistant mutant, cellulase biosynthesis 1746.mutants, cellulose biodegradation, *Aspergillus fumigatus* 2707.photoreduction, choline oxidase, *Alcaligenes* 891.photosensitivity, *Haemophilus influenzae*, anaerobic conditions, nitrogen 4749.protection, synergism, pathogenicity, *Bacillus thuringiensis* var. *entomocidus*, *Spodoptera littoralis*, biological control 131.

sterilization 1364.

U.V. Spectroscopy,calmodulin multiple forms, *Agaricus campestris*, *Coprinus lagopus* 8513.cytochrome d oxidation, sodium nitrate effects on, *Escherichia coli* 2565.nickel tetraphenyl colofator F-430 multiple forms, comparison, *Methanobacterium thermoautotrophicum* 4291.

tryptophan residues role, gene 32 protein binding polynucleotides, phage T4 4255.

victoria, *Bipolaris victoriae* 7910.**Ubiquinone,**

bacteria, separation techniques, high-pressure liquid chromatography 1652.

production, fermentation, ammonium stimulation, *Agrobacterium* 7681.**Ulmus,**Dutch elm disease, *Ceratocystis ulmi*, disease control 5606.Dutch elm disease, *Ceratocystis ulmi* hypovirulence, geographical isolates 8192.

Phomopsis oblonga opportunistic infection 7232.

plant breeding, disease resistance, *Ceratocystis ulmi* Dutch elm disease 8186.

plant breeding, disease resistance, Dutch elm disease 2870.

Ulmus americana,disease resistance compounds, antifungal activity, Dutch elm disease, *Ceratocystis ulmi* 366.Dutch elm disease, biological control *Streptomyces albobivaceus*, *Streptomyces griseus*, inoculation 2890.mansoniensis isolation, antifungal activity, role disease resistance, *Ceratocystis ulmi*, Dutch elm disease 3926.**Ulmus glabra,**phytoalexins, defensive mechanisms, infection, *Ceratocystis ulmi*, *Chondrostereum purpureum*, *Coriulius versicolor* 5500.**Ulmus wallichiana,**host-pathogen interactions, *Uncinula clandestina*, isolation, morphology 8191.**Ultracentrifugation,**

density gradients, cesium chloride, foot-and-mouth disease virus 6736.

+electron microscopy, rotavirus detection, methodology comparison 1558.

rubella virus specificity immunoglobulin M, serum, man 591.

Ultratiltration,

biotechnology products purification 4145.

factors affecting, *Erwinia carotovora*, *Pseudomonas*, enzymes, separation, cells, extracts 6019.

formate dehydrogenase purification, ion exchange 7733.

isolation, phages, poliovirus, rotavirus, reovirus, water reclamation 2396.

membranes, immobilized cells, *Caldanella acidiphila*, enzymes thermal stability 764.

milk, fermentation, single-cell protein, nutritive value, pigs 1916.

milk, lactose fermentation, single-cell protein, *Trichosporon cutaneum* 1719.

proteins purification 3431.

Ultrahigh temperature,

sterilization, food, reviews 7032.

sterilization, heat inactivation α -amylase, *Bacillus stearothermophilus*, *Xanthomonas campestris*, dairy products 6974.**Ultrasound,**+heat treatment, synergism, sterilization, *Streptococcus faecium* 4034.

separation techniques, sediments, enumeration, methodology, bacteria 9305.

use β -lactam antibiotics synthesis 7406.**Ulva,**

biomass, methanogenic bacteria, digestion (anaerobic), methanogenesis production 2183.

biomass production, nitrogen sources effects on digestion (anaerobic), methanogenesis 6396.

Uncinula,

host-pathogen interactions, trees, isolation, morphology 8191.

Uncinula adunca,host-pathogen interactions, *Salix alba*, *Salix wallichiana*, isolation, morphology 8191.**Uncinula clandestina,**host-pathogen interactions, *Ulmus wallichiana*, isolation, morphology 8191.**Uncinula clintonii,**host-pathogen interactions, *Celtis australis*, isolation, morphology 8191.**Uncinula necator,**

powdery mildew, Vitis, association, yield, growth, wine quality, USA, New York 8833.

Uncinula necator,

powdery mildew, Vitis vinifera, sulfur applications, disease control 340.

Uncouplers,

averufin, mitochondria oxidative phosphorylation 4472.

Uracil,

analogs, 9-[2-hydroxy-1-(hydroxymethyl)ethoxy]-methyl]guanine, antiviral activity, herpesvirus 4013.

derivatives, synthesis, antiviral activity, herpes simplex virus 1, herpes simplex virus 2 6482.

Uranium,adsorption, desorption, biomass, *Rhizopus arrhizus* 9028.adsorption, *Rhizopus arrhizus* biomass 3978.bioaccumulation, polysaccharides adsorption, *Zoogloea ramigera* 3973.resistance, *Thiobacillus ferrooxidans* 1311.**Urate oxidase,**subunits, Glycine max nodules nitrogen fixation, *Rhizobium* infection 4668.**Urban environments,**

drinking water, viruses analysis, Canada 4955.

Urdbean leaf crinkle virus,disease resistance, plant breeding, *Vigna radiata* 2071.**Urea,**

adsorption, soil, Trinidad 7288.

biodegradation, nitrification, soils (acid), heterotrophic bacteria 4671.

Urea, (continued)

effects on, lactic acid bacteria acid production, silage fermentation, *Zea mays* 7873.
fertilization effects on soil microorganisms, decomposition, wood, forests 5578.
fertilizer applications, urease hydrolysis, ammonium production, soil microorganisms 6383.
fertilizers (slow release), granules, sulfur coatings, nitrification 8231.
fertilizers, sulfur coatings, savannahs soil, pH, nitrogen levels 8256.
foliar applications, effects on rhizosphere microorganisms respiration, *Triticum aestivum* 2946.
hydrolysis, urease activity, soil 7250.
N-bacter, hydrolysis, effects on, nitrification, wastewater treatment 6678.
nutrient requirements, industrial effluents distilleries, *Bacillus* 5818.
treatment, silage, straw, digestibility, sheep 1067.
Ureaplasma,
antibacterial activity, herbicolin A 9214.
isolation, semen, cattle, antibiotic sensitivity testing 7473.
Ureaplasma urealyticum,
antibodies detection, enzyme-linked immunosorbent assay optimization 4178.
enumeration, methodology 659.
isolation, identification, media (isolation) comparison 658.
minocycline resistance, clinical isolates 3020.
moximycin antibacterial activity 8368.
serotyping, methodology 733.
urogenital tract, media (isolation) 1865.
Urease,
activity, *Mycobacterium* identification, *Bactec* test 692.
activity, soil, Cook Is., Tongan Is. 8225.
activity, soil microorganisms 1254.
activity, soil, urea hydrolysis 7250.
immobilization methodology 4313.
immobilized enzymes, methodology 3468.
inhibitors, ammonia volatilization, fertilizer applications 1285.
organic compounds synthesis 4385.
urea, hydrolysis, ammonium production, fertilizer applications, soil microorganisms 6383.
urea, hydrolysis, ammonium production, fertilizer applications, soil microorganisms 6383.
Uredinales,
haustoria, chemicals induction 6221.
Urediniospores,
cell culture, *Puccinia coronata*, infection, coleoptile, *Avena sativa* 2791.
disease transmission, broom mosaic virus, *Puccinia graminis* f.sp.tritici,
 Puccinia recondita f.sp.tritici, leaf rust, stem rust, *Triticum aestivum* 2789.
Gramineae, rust, *Puccinia graminis*, *Puccinia recondita*, epidemiology 5417.
pathogenesis, leaf rust, *Vicia faba*, nutrient requirements 5408.
Puccinia graminis f.sp.tritici, broom mosaic virus, disease transmission, stem rust, *Triticum aestivum* 2790.
Puccinia hordei, aerosols, deposition, methodology, *Hordeum vulgare* 8786.
spore germination, *Melampsorium betulinum*, temperature effects on, rust, *Betula* 8950.
sporulation, *Cronartium flaccidum*, environmental factors effects on, infection, *Vincetoxicum officinale* 3927.
Uredo cajan,
disease resistance plant breeding, *Cajanus cajan* 8899.
Uredospores,
Puccinia graminis f.sp.tritici, infectivity analysis, association *Triticum aestivum* stem rust 250.
Ureides,
biothesis pathways, Rhizobium, nodules, Leguminosae 2971.
levels, indicators, nitrogen fixation, acetylene reduction, Glycine max 2164.
levels, relationship nitrogen fixation, acetylene reduction, Glycine max 2162.
Urethanes,
derivatives, antimicrobial activity, *Candida albicans*, *Penicillium digitatum*, gram-positive bacteria 1436.
Urethritis,
differential diagnosis, non-specific urethritis, use, *Neisseria gonorrhoeae*, DNA hybridization analysis, man 679.
Neisseria gonorrhoeae, diagnosis, Limulus lysate test, methodology, man 671.
Urticaria,
analogs, synthesis, antiviral activity, herpes simplex virus 1 4031.
Uryl,
bacteria, antibacterial activity, norfloxacin, factors affecting drug resistance 6466.
bacteria, clinical isolates, susceptibility, dextroamoxamine 4729.
clinical isolates, antibiotic sensitivity testing 9158.
clinical isolates, identification, antibiotic sensitivity testing, methodology 3315.
isolates, norfloxacin antibacterial activity, antibacterial agents comparison 6453.
microflora isolates, bacteria, antibiotic sensitivity testing 6501.
Urinary tract infection,
bacteria, clinical isolates, antibiotic sensitivity testing, amoxicillin± clavulanic acid 6525.
bacteria, drugs treatment, man 2212.
bacteria isolates, antibiotic sensitivity testing, dogs 4787.
Urine,
bacteriuria, detection, automated methods 726.
bacteriuria, screening methodology 750.
Bacterioides fragilis antigens detection, enzyme-linked immunosorbent assay, experimental infection, rats 6722.
Bacterioides fragilis antigens detection, enzyme-linked immunosorbent assay, man 7604.
cattle, soil, effects on denitrification 2948.
cefazidime, high-pressure liquid chromatography 500.
culture, bacteriuria diagnosis, bacteria identification 7594.
culture, liquids comparison freeze drying preservatives, effects on microorganisms growth 3268.
culture, tubes, samples volume, preservatives, bacteriuria activity 708.
disposal test, detection, bacteriuria 7574.
gram-negative bacteria isolates, media (culture) methodology, man 1588.
man, Haemophilus influenzae b polyribose phosphate antigens detection,

Urine, (continued)

agglutination tests 1584.
pH, osmotic potential effects on gentamicin antibacterial activity, *Escherichia coli*, *Pseudomonas aeruginosa* 3108.
preservatives, media (transport), bacteriuria diagnosis 1608.
screening, automated methods, bacteriuria 7577.
screening, bacteriuria, automated methods, clinical microbiology 690.
screening, bacteriuria detection, automated methods 3339.
screening, bacteriuria diagnosis, man 1642.
screening methodology, bacteria analysis 1651.
screening methodology, bacteria analysis 1670.
screening projects, bacteriuria, Autobac test, staining 6784.
specimens, antimicrobial agents antibacterial activity 3048.
specimens, man, Enterobacteriaceae, identification, drug sensitivity testing, methodology 1585.
Staphylococcus saprophyticus identification methodology 3306.
Urocystis agropyri,
cytology, morphogenesis, infection, *Triticum aestivum* 4517.

Uromyces alysicarpi,

rust, *Alysicarpus moniifer*, India 2036.

Uromyces appendiculatus,

monokaryons, dikaryons, virulence comparison, *Phaseolus vulgaris* 2780.
rust, disease resistance, *Phaseolus vulgaris*, inheritance 2850.

Uromyces digitatus,

rust, *Acacia*, Hawaii 7236.

Uromyces fabae,

rust, *Vicia faba*, triadimefon, antifungal activity 3901.

Uromyces koae,

rust, *Acacia*, Hawaii 7236.

Uromyces phaseoli,

haustoria inhibition, triphenylphosphite, rust, *Phaseolus vulgaris* 2899.
infection, appressoria formation, plants, factors affecting 1964.
rust, *Phaseolus vulgaris*, association, chloroplasts ultrastructure, chlorophyll levels 2775.
rust, *Phaseolus vulgaris*, disease resistance, cultivars comparison, sporulation incidence 8082.
rust, *Phaseolus vulgaris*, plant breeding, disease resistance 3857.
rust, races, virulence, disease resistance, *Phaseolus vulgaris* 2846.
Uromyces phaseoli var. typica,
rust, chitin assays, histopathology, *Phaseolus vulgaris* 1967.
Uromyces phaseoli var. vignae,
rust, chitin assays, histopathology, *Phaseolus vulgaris* 1967.
Uromyces sriatus,
rust, *Trigonella polyocera*, India 2036.
Uromyces trifolii,
rust, *Trifolium repens* 8781.

Uromyces vicia-fabae,

rust, *Vicia faba*, triadimefon effects on ultrastructure 8131.

Uromyces viciae-fabae,

disease resistance, *Vicia faba* 1198.
infection, *Vicia faba*, *Cryptococcus synergism* 7135.
rust, disease resistance, plant breeding, *Vicia faba* 2882.
rust, susceptibility, *Pisum sativum*, varieties 8774.
urediniospores, pathogenesis, leaf rust, *Vicia faba*, nutrient requirements 5408.
USA,
cooling towers, *Legionella pneumophila* geographical distribution, seasonal variations 4130.
Cucurbitaceae, plant diseases, zucchini yellow mosaic virus 6269.
epidemiology, *Saccharum* rust, *Puccinia melanocephala* 1124.
Fusarium oxysporum f.sp.vasinfestum, isolation, *Gossypium hirsutum*, races geographical distribution 1153.
grain, incidence, *Aspergillus glaucus*, storage conditions 8056.
incidence, geographical distribution, *Puccinia graminis* races, isolation, *Avena sativa*, *Triticum aestivum* 1125.
lakes, microbial pollution, coliforms, pollution monitoring, indicator species, spatial distribution, seasonal variations 8419.
methanogenesis, biotechnology 6395.
Neisseria gonorrhoeae isolation, identification, quality control 3075.
Pisum penderos, disease resistance, needle blight 8941.
Pseudotsuga menziesii, endomycorrhizas symbiosis, role, drought tolerance 2913.

USA, Alaska,

nutrient cycles, forest floor, taiga 5545.

USA, Arizona,

Gossypium hirsutum, *Malva parviflora*, *Phaseolus vulgaris*, cotton leaf crumple disease, virus-like particles etiology, epidemics 8814.
Lycopersicon esculentum, *Cymopsis tetragonoloba*, *Caesalpinia gilliesii*, incidence, incidence, powdery mildew, *Leveillula taurica* 8035.
Macrophoma phaseolina latent infection, sclerotia soil levels, *Euphorbia lathyrus*, weeds 8044.
soil microorganisms geographical distribution, deserts, forests 7246.

USA, California,

Actinidia chinensis, *Pseudomonas canker*, pathogenesis 275.
coastal waters, *Vibrio cholerae* enumeration, seasonal variations 6715.
coarider feathery red-vein virus, vectors, *Hyadaphis foeniculi* 3822.
epidemiology, watermelon mosaic virus 2, squash mosaic virus, *Bemisia tabaci*, disease transmission, *Cucumis melo*, *Cucurbita pepo* 3821.
greenhouses, *Medicago sativa* seedlings fungi diseases 1115.
Lycopersicon esculentum, ring spot, etiology, tomato mosaic virus strains 8842.
semiarid environments, deserts, ecological evaluation, vesicular-arbuscular mycorrhizas 8222.

USA, Colorado,

Streptococcus pneumoniae, clinical isolates, antibiotic resistance, penicillin, chloramphenicol 436.
Triticum cultivars, wheat streak mosaic virus infection, etiology, incidence 7980.

USA, Florida,

Pinus elliotti var. *elliotti*, fusiform rust, phenology, *Cronartium quercum* f.sp.fusiforme inoculum 3921.
wastewater treatment, parks 5845.
wastewater treatment, sludges, isolation, *Salmonella*, indicator species, characterization 4927.
zucchini yellow mosaic virus host range 3815.

USA, Georgia,

Glycine max, fungicides foliar applications, prophylaxis, disease control, plant

Vaccines, (continued)

hepatitis B virus, purification, immunoaffinity chromatography 6603.
 hepatitis B virus, synthetic peptides 6623.
 hepatitis viruses, standardization, books, conferences 4245.
 influenza A virus, recombinants, genetic analysis 5808.
 influenza virus levels 2320.
 influenza virus, rubella virus, liposomes, incorporation, membrane proteins, immunogenicity, rabbits 6650.
 Leptospira, immunogenicity, pigs 4893.
 live, avian laryngotracheitis virus, infectivity, immunity, chickens 3180.
 live, cold adaptations, recombinants, attenuation, influenza A virus 7482.
 live, genetic engineering, herpes simplex virus 6622.
 live, hepatitis A virus, attenuation fibroblasts cell culture, antibody response, animal models 6646.
 live, recombinants, cold adaptations, attenuation, influenza A virus 7484.
 live rinderpest virus, production, tissue culture methodology 3181.
 live, temperature effects on attenuation, rubella virus 7485.
 models, immunoglobulin G antisera inhibition models, 7-mos gene proteins, Moloney sarcoma virus 6648.
 mumps virus, antibody response, enzyme-linked immunosorbent assay comparison neutralization 2436.
 Neisseria gonorrhoeae, Neisseria meningitidis, pili, production, immunogenicity 538.
 Neisseria gonorrhoeae, pili, production 539.
 Pasteurella haemolytica+Clostridium, sheep, efficacy, experimental infection, gnotobiotics (specific pathogen free) 7488.
 poliovirus 3, production, virulence, antigenicity 6624.
 polysaccharides proteins conjugate, preparation, immunogenicity, gram-negative bacteria 2323.
 production, antigenic determinants, hybrids, gram-negative bacteria 6644.
 production, antigenicity, antigens, feline panleukopenia virus 6619.
 production, antigens, cloning, gene expression, neutralization, herpes simplex virus 6610.
 production, antigens genes cloning, genetic engineering, viruses 5807.
 production, attenuation, antigenicity, hemagglutinins, reovirus 6627.
 production, attenuation, influenza A virus 6602.
 production, BCG, colonial characteristics 4079.
 production, capsid protein antigenic determinants, poliovirus 6614.
 production, cloning, hemagglutinins, neuraminidase, influenza virus 6598.
 production, fermenters, chick embryos cells growth optimization, viruses 4077.
 production, formaldehyde, inactivation, foot-and-mouth disease virus 5809.
 production, gene expression, glycoproteins, herpes simplex virus 6611.
 production, genes cloning, antigens, rotavirus 6643.
 production, genetic engineering, avian infectious bronchitis virus 6637.
 production, genetic engineering, hepatitis B virus 6608.
 production, genetic engineering, herpes simplex virus 6616.
 production, genetic engineering, influenza virus 6604.
 production, genetic engineering, recombinants, picornavirus 6635.
 production, genetic engineering, recombinants, poxvirus 6633.
 production, genetic engineering, recombinants, vaccinia virus 6638.
 production, glycoproteins antigenic determinants, localization, rabies virus 6632.
 production, glycoproteins, transmissible gastroenteritis virus 6661.
 production, Haemophilus influenzae antigens isolation, immunogenicity, cattle 4895.
 production, hemagglutinins, Bordetella pertussis 3176.
 production, hemagglutinins, expression, cloning vectors, immunogenicity, antigenicity, influenza virus 6636.
 production, hemagglutinins purification, immunogenicity, Bordetella pertussis 8389.
 production, hepatitis A virus 6645.
 production, hepatitis B surface antigen transfection animal cells, hepatitis B virus 6594.
 production, immunogenicity, DNA recombination, synthetic peptides, hepatitis B virus 6615.
 production, immunogenicity, synthetic peptides, hepatitis B surface antigen 6609.
 production, immunoprophylaxis, genetic engineering, rotavirus 6595.
 production, industrial applications, bacteria, viruses 9218.
 production, influenza virus envelopes proteins, isolation, immunogenicity, mice 6620.
 production, live, recombinants, vaccinia virus 6596.
 production, pathogenicity, recombinants, influenza virus 6606.
 production, poliovirus 1, capsid protein expression, cloning vectors, Escherichia coli 6605.
 production, rabies virus strains, immunogenicity, Vulpes vulpes 6629.
 production, recombinants, rotavirus 6599.
 production, reviews, viruses 7480.
 production, synthetic peptides, foot-and-mouth disease virus, antigenicity, cattle 6659.
 production, synthetic proteins, immunogenicity, antigenic determinants, herpes simplex virus 6639.
 production, use hepatitis B surface antigen receptors, albumin polymers, role organotropism, liver, man, Pan troglodytes 7481.
 production, use herpes simplex virus 1, glycoproteins gene expression, antigenic determinants, cell lines, mammalian cells 6591.
 production, use influenza virus, hemagglutinins, stimulation natural killer cells cytotoxicity 6647.
 production, veterinary medicine, reviews, bacteria, viruses 5806.
 production, viruses, genetic engineering, bacteria 4075.
 production, viruses, reviews 9220.
 Pseudomonas aeruginosa, development, immunogenicity, mice 6663.
 pseudorabies virus, use, preparation, Lens culinaris agglutinins+agarose immobilization, pigs 3182.
 purification, toxicoids, toxins, Corynebacterium diphtheriae 4889.
 rabies virus, development 4894.
 rabies virus, membranes glycoproteins, lysosomes incorporation, antibody response, mice 6660.
 rabies virus, new records, clinical trials, man 9221.
 reovirus, production, serotypes, proteins, antigenic determinants 6613.
 respiratory syncytial virus, production, genomes characterization 6630.
 Rocky Mountain spotted fever, immunogenicity, efficacy 2326.
 rotavirus (bovine), immunogenicity, animal models 3177.
 Salmonella, production, antigen O, immunogenicity 2322.
 Salmonella typhi, Shigella sonnei association, antigenicity, safety 4890.
 Salmonella typhimurium, β -prolactinase inactivation, immunogenicity, mice 2324.

Vaccines, (continued)

Salmonella typhimurium, salmonellosis prophylaxis, cattle 5811.
 Sendai virus, proteins purification, high-performance liquid chromatography 6649.
 serological tests, standardization, chickens 5036.
 Shigella flexneri, drug resistance, virulence, immunogenicity 4080.
 Streptococcus pneumoniae, capsules polysaccharides, antibody response, enzyme-linked immunosorbent assay, children 682.
 Streptococcus pneumoniae, preparation 542.
 Streptococcus pneumoniae, use, lymphocytes B function analysis, man, reviews 3356.
 synthetic antigens, immunogenicity, production, influenza virus 6601.
 synthetic antigens, toxins, Vibrio cholerae 6654.
 synthetic antigens, viruses, production methodology 6625.
 synthetic, development methodology, bacteria 9222.
 synthetic peptides, pili, antigenic determinants, antigen-antibody interactions, structure-activity relationships, Escherichia coli 6657.
 typhus, purification 3179.
 use, synthetic hepatitis B surface antigen+fatty acids conjugate, immunogenicity, animal models 4071.
 viruses, development, biotechnology, immunological aspects 7483.
 viruses, DNA, genetic engineering, reviews 8386.
 viruses, genetic engineering 4073.
 yellow fever virus, assays 6590.
Vaccinia virus,
 antiviral activity, aryl-furfurane derivatives 4764.
 antiviral activity, cis-platinum diaminodichloride 9124.
 antiviral activity, tetrahydro-2(1H)-pyrimidinone derivatives, structure-activity relationships 8321.
 genetic engineering, vaccines, methodology 8385.
 inactivation, slurries, pigs, factors affecting digestion (anaerobic) 6684.
 infected L cells, prostaglandin A1 antiviral activity, gene expression inhibition 5749.
 infection, interferon antiviral activity, HeLa cells, mice L cells 1350.
 interferon, antiviral activity, cell culture, mice 2226.
 recombinants, live vaccines production 6596.
 transfection, recombinants, influenza virus hemagglutinins gene expression, induction antibody response, hamsters, rabbits 4887.
 vaccines production, genetic engineering, recombinants 6638.
Vaccinium,
 mycorrhizas, Oidiendendron griseum, characterization 1262.
Vaccinula ashei,
 stem canker, Botryosphaeria corticis 5466.
Vaccinium corymbosum,
 stem canker, Botryosphaeria corticis 5466.
Vaccinium macrocarpon,
 Botryosphaeria vaccinii latent infection, pathology, association, dew temperature 8041.
Vaccinium myrtillus,
 little leaf, mycoplasma-like organisms, phloem 6275.
Vaccinium vitis-idaea,
 little leaf, mycoplasma-like organisms, phloem 6275.
Vacuoles,
 formation, plasma membranes, antifungal activity, miconazole, Trichophyton mentagrophytes 9109.
Vacuum packaging,
 films, oxygen permeability, organoleptic evaluation, mutton 5362.
 fishery products, chlorotetracycline, +potassium sorbate, +tetrastadium ethylenediaminetetraacetate, preservation 7885.
 meat, food contamination, bacteria, yeasts, effects on food spoilage 3730.
 meat, lactic acid bacteria 4446.
 spoilage, luncheon meat 8715.
 spoilage, psychrotrophic bacteria, veal 5363.
Vagina,
 clinical isolates, Gardnerella vaginalis, identification methodology 2480.
 second-trimester abortus antigens, detection, enzyme-linked immunosorbent assay, cattle 6763.
Vaginitis,
 Gardnerella vaginalis, diagnosis, cell culture 1591.
Valine,
 genes, role, Escherichia coli mutagenicity testing 6775.
L-Valine,
 overproduction, mutants, transformation, Brevibacterium lactofermentum 5116.
Valinomycin,
 antibacterial activity, Escherichia coli, polymyxin B, sensitization 7453.
 toxicity, comparison Bacillus thuringiensis toxins, larvae, Aedes aegypti 2661.
Valis ceratoperma,
 antifungal activity, propanosine 3149.
Valis mali,
 canker, disease control, antibiotics+copper sulfate, Malus 8139.
Vancocycin,
 antibacterial activity mechanisms, chemical properties, reviews 5804.
 antibacterial activity 2278.
 antibacterial activity, Bacteroides, use, media (selective) 3125.
 antibacterial activity, clinical isolates, Staphylococcus 4805.
 antibacterial activity, Staphylococcus aureus 7422.
 antibacterial activity, Staphylococcus aureus, Staphylococcus epidermidis, Streptococcus faecalis 4815.
 antibacterial activity, Streptococcus faecalis, Streptococcus faecium 4811.
 antibiotic sensitivity testing, Streptococcus faecalis 4808.
 antibiotic sensitivity testing, Streptococcus pneumoniae 8503.
 antibiotic synergism, gentamicin, bactericidal activity, Streptococcus group G 7423.
 antibiotic synergism, rifamycin, antibacterial activity, Staphylococcus epidermidis 8359.
 anesthetic tolerance, Streptococcus 6434.
 comparison, penicillin, prophylaxis, bacteria contamination, viruses isolation cell culture 1557.
 disc-diffusion test, comparison, potassium hydroxide suspensions, identification, aerobic bacteria, rods 3262.
 disease control, crown gall, Malus pumila 343.
 high-performance liquid chromatography 3152.
 high-pressure liquid chromatography, serum 8386.
 Mycobacterium smegmatis auxotrophs isolation methodology 3348.
 N.M.R., biosynthesis, characterization 7463.
 rifampicin, antibiotic synergism, antibiotic sensitivity testing, bactericidal activity, Staphylococcus aureus 7413.

- Vancomycin, (continued)**
serum levels, radioimmunoassay, comparison, fluorescence polarization immunoassays, man 3116.
structure 8383.
- Vanillic acid,**
catabolism, association, biodegradation 1000.
metabolism, decay fungi, white rot, brown rot, soft rot, association, lignin, biodegradation 2705.
metabolism, 2-methoxy-1,4-benzoquinone biosynthesis, laccase activity, fungi 8644.
- Vapors,**
phase separation techniques, ethanol fermentation 1875.
- Varicella-zoster virus,**
antibodies, detection, use, anti complement immunofluorescence, serum, man 1566.
antigens, skin tests, immunoassays 8447.
antiviral agents + α -interferon, antiviral activity synergism 4766.
detection, DNA hybridization analysis, cell culture 8452.
drug resistance, 1- β -D-arabinofuranosyl-E-5-(2-bromovinyl)uracil, characterization 8403.
immunity, man, characterization, fluorescent antibody test, comparison, enzyme-linked immunosorbent assay 636.
immunoglobulin G, radioimmunoassay, methodology 5009.
immunization, protein A, membrane filtration 5889.
membrane antigens, antibodies detection, enzyme immunoassay methodology 5880.
vaccines strains, antiviral agents susceptibility 4777.
- Vascular system,**
glycine mac, translocation, nitrogen fixation, *Rhizobium japonicum* 2956.
- Veal,**
vacuum packaging, nitrogen packaging, spoilage, psychrotrophic bacteria, organoleptic evaluation 5363.
- Vector-borne diseases,**
squash leaf curl virus, *Bemisia tabaci*, characterization, disease transmission, *Cucurbita* 1150.
- Vectors,**
Aleyrodidae, yellow mosaic virus, plant diseases, *Phaseolus aureus*, disease control 3678.
Aphididae, barley yellow dwarf virus infection, Gramineae, interaction 1989.
Aphididae, disease spread, bean yellow mosaic virus, subterranean clover red leaf virus, epidemiology, *Vicia faba* 5405.
Aphis craccivora, cowpea aphid-borne mosaic virus disease transmission, *Vigna unguiculata* infestation resistance 7137.
Aphis gossypii, disease transmission, abaca mosaic virus, banana mosaic virus, *Musa textilis* 6276.
Aris, *Erwinia amylovora* fire blight, disease transmission, *Pyrus communis* 5442.
Aulacorthum circumflexum, subterranean clover red leaf virus disease transmission 4503.
Bemisia tabaci, disease transmission, cowpea mosaic virus, infectivity, *Vigna unguiculata* 3784.
Bemisia tabaci, population density, seasonal variations, cowpea mosaic virus, *Vigna unguiculata*, *Phaseolus lunatus* 3783.
Cicadellidae, Delphacidae, disease transmission, viruses, mycoplasma-like organisms, *Oryza sativa* 7156.
Colladonus montanus, Scaphytopius nitridus, disease transmission, yellows, X-disease, *Spiroplasma citri* isolation 8021.
cotton leafy roll-red-vein virus, *Hyadaphis foeniculi*, USA, California 3822.
Delphacidae, Cicadellidae, disease transmission, mycoplasma-like organisms, Japan 7157.
disease transmission, plant viruses, Delphacidae, Cicadellidae 7130.
Euscelidius variegatus, transmission, *Spiroplasma stunt*, *Snipais aiba*, *Pisum sativum*, *Raphanus sativus*, *Spinacia oleracea* 8030.
integrated control, pest control 7648.
Lehmanna marginata, *Endothia parasticta*, blight, *Castanea* 8954.
mum bean yellow mosaic virus, Aleyrodidae, chemical control, insecticides, *Vigna radiata* 2055.
Myzus persicae, potato leaf roll virus, disease transmission, host range 4553.
Myzus persicae, potato leaf roll virus infection, *Solanum tuberosum*, insecticides, disease control 2065.
Nematode, plant viruses disease transmission 6217.
Nephotettix virescens, chemical control, carbofuran, phorate, disease control rice tungro virus, *Oryza sativa* 2072.
Paracarsidara concolor, little leaf disease transmission, rikettsia-like organisms, mycoplasma-like organisms, treatment, *Wissadula periplocifolia*, Jamaica 2047.
Polymyxa betae, plant viruses, plant diseases, roots, *Beta vulgaris*, British Isles 7190.
Pseudococcus longispinus, disease transmission, grapevine virus A, plant diseases, *Vitis vinifera* 3844.
Raphidopalpa levicollis, disease transmission, cucumber green mottle mosaic virus, *Lagenaria siceraria*, *Cucurbita pepo* 8850.
rice tungro virus, *Nephotettix virescens*, pest control, carbofuran formulations, *Oryza sativa* 6295.
Spiroplasma stunt, Mycoplasma bushy stunt, host range, *Dalbulus longulus* 7960.
tomato ringspot virus, *Xiphinema*, stem pitting, *Prunus persica* 8811.
Xiphinema index, grapevine fanleaf virus detection, enzyme-linked immunosorbent assay methodology 3255.
- Vegetables,**
canned food, toxins, *Clostridium botulinum* 3719.
fermentation, mixed, continuous culture, lactic acid bacteria 2740.
fermentation, dialysis culture, lactic acid bacteria + vegetables 7871.
fermented food, production, role, lactic acid bacteria, reviews 211.
plant breeding, disease resistance, plant viruses 3856.
- Vegetative cells,**
Bacillus subtilis, sporulation promotion factors, detection methodology 3334.
Clostridium botulinum, nitrite effects on iron-sulfur centers 6203.
growth stage, inheritance stripe rust, *Triticum hybrids* 2886.
- Veinroll,**
rRNA, comparison methodology 2513.
- Veins,**
spot, *Carya illinoensis*, *Gnomina nervida*, pathogenesis, epidemiology, disease control, fungicides 1137.
- Venezuela,**
children, gastroenteritis, rotavirus (human) incidence, enzyme-linked immunosorbent assay 4165.
- Venezuelan equine encephalitis virus,**
monoclonal antibodies, antiviral activity 2328.
- Ventilation,**
composting, temperature, evaporation, oxygenation 4085.
mortuaries, bacteria aerosols, environmental hygiene 2415.
- Venturia inaequalis,**
ascospores, air spora, samplers, epidemiology 804.
1,4-naphthoquinone derivatives antifungal activity 9103.
overwintering, *Malus* 2001.
scab, *Malus floribunda*, pathogenicity, growth, leaves 7988.
scab, *Malus pumila*, capitan use, disease control, residues 8925.
scab, *Malus pumila*, disease resistance, plant breeding 2835.
scab, *Malus pumila* fruits, susceptibility, role, age, temperature, water availability 2797.
scab, sterols inhibitors, disease control, *Malus* 3881.
- Venturia pyrina,**
scab, disease resistance, *Pyrus amygdaliformis*, *Pyrus communis* 8080.
- Verapamil,**
inhibition, influenza A virus, replication, MDCK cells 8331.
- Vero cells,**
African swine fever virus cell culture, beads carriers, fermenters 1544.
cell culture, Sephadex carriers, propagation, mumps virus 7562.
enterotoxins detection methodology, *Escherichia coli* serotyping 3345.
identification differentiation methodology, herpes simplex virus 1, herpes simplex virus 2 8457.
sensitivity, poliovirus antibodies titration 5003.
SV40, DNA, transection, methodology 5000.
- Verrucaria J,**
Stachybotrys chartarum, biosynthesis, media (culture) 7072.
- Verrucarol,**
Mycrothecium verrucaria, production, in vitro 7895.
- Versicolorin,**
production, zinc effects on, *Aspergillus parasiticus* 7887.
- Vertical distribution,**
 β -D-fructofuranosidase activity, measuring techniques, soil 6333.
rhizosphere microorganisms, *Areca* 5646.
soil, *Myrica galea*, *Marsipium androsaceus*, *Onychiurus latus* grazing effects on, forests, *Gaiopsis sitchensis* 8939.
- Verticillidella,**
liquid culture, biosynthesis, antibiotics, phytotoxins 972.
- Verticillidella procer,**
incidence, soil, infection pathogenesis, *Pinus strobus*, *Pinus sylvestris*, USA, Virginia 3919.
- Verticillidella wagneri,**
black stain, *Pseudotsuga menziesii*, thinning association 3924.
morphology, variants, host specificity, *Pseudotsuga menziesii*, *Pinus ponderosa* 4613.
- Verticillium,**
parasites, *Rhizobium*, *Apheleneus* 2126.
wilt, disease resistance, plant breeding, cultivars, *Lycopersicon esculentum* 1178.
wilt, *Gossypium hirsutum*, cellulose conversion, glucose production, cellulase 3683.
wilt, *Rhizobium meliloti* growth, *Medicago sativa*, fungicides effects on 1211.
- Verticillium albo-atrum,**
antifungal activity, fungicides 8922.
conidia antigenic characteristics, relationship virulence, *Humulus lupulus* 2006.
infection, *Lycopersicon esculentum*, phytoalexins characterization 7200.
infection, *Medicago sativa*, pathogenesis, xylem 1118.
infection, tubers, *Solanum tuberosum* 8031.
pathogenesis, *Humulus lupulus*, colonization correlation disease resistance 7207.
pathogenicity, wilt, *Humulus lupulus* 5459.
resistance, benomyl, trimorfolad 3049.
wilt, *Cicer aethiopicum*, epidemiology, Pakistan 1117.
wilt, disease resistance, cytogenetics *Medicago sativa* 2884.
wilt, *Medicago sativa*, hydroxyproline content, cell walls, association 7928.
wilt, vesicular-arbuscular mycorrhizas inoculation effects on, *Lycopersicon esculentum* 325.
- Verticillium biguttatum,**
biological control, *Rhizoctonia solani*, plant diseases, *Solanum tuberosum* 5514.
hyperparasitism, biological control, *Rhizoctonia solani*, mycelia soil amendment, *Solanum tuberosum* 2089.
treatment, *Rhizoctonia solani* sclerotia biological control, *Lycopersicon esculentum* 325.
- Verticillium dahliae,**
disease control, composting, crop residues 2842.
disease transmission, *Solanum tuberosum* 7183.
distribution, *Mentha piperita* stems, disease resistance relationship 7204.
fungicides, soil amendment, disease control, *Solanum tuberosum* 8121.
infection, *Solanum tuberosum*, disease control, use, irrigation + metam + sodium, effects on yield 1209.
infection, tubers, *Solanum tuberosum* 8031.
 β -ionone, derivatives, retinol, antifungal activity 6491.
mycelia, sclerotia, structure, *Solanum tuberosum* 7936.
pathogenicity, *Gossypium hirsutum*, soil-borne diseases association crop rotation 1149.
pathogenicity, plant diseases, sclerotia characterization 2023.
plant diseases, *Solanum tuberosum*, roots growth 5460.
propagules, distribution, soil, USA, Ohio 7918.
races, pathogenicity, *Lycopersicon esculentum*, Morocco 8038.
relationship, *Erwinia carotovora* subsp. *carotovora*, infection, pathology, *Solanum tuberosum* 4533.
tolerance, benzimidazoles 5720.
wilt, *Gossypium barbadense*, phytoalexins accumulation association 2824.
wilt, *Lycopersicon esculentum*, disease resistance, plant breeding 2066.
wilt, *Lycopersicon esculentum*, epidemiology, USA, North Carolina 5456.
wilt, *Lycopersicon esculentum* predisposing factors, potassium, phosphorus 3833.
wilt, synergism, *Erwinia carotovora* subsp. *atropsecta*, *Erwinia carotovora* subsp. *carotovora*, blackleg, *Solanum tuberosum* 7191.
- Verticillium fungicola var. fungicola,**
pathogens, disease control, thiabendazole, *Agaricus brunneus* 8132.
- Verticillium lecanii,**
biological control, benomyl, foliar applications effects on, *Myzus persicae*, conidia, spore germination, inhibition, carbaryl + iprodione, integrated control, Aphididae 2654.

- Verticillium psalliotae**, hyperparasitism, *Hemileia vastatrix* rust, *Coffea*, Malaysia 1204.
- Vesicles**, vesicular-arbuscular mycorrhizas, comparison, vesicular-arbuscular mycorrhizas + roots, use, inoculum 2153.
- Vesicular stomatitis virus**, antibodies, detection, counter immunoelectrophoresis, methodology 7569.
- antiviral activity, cis-platinum diamminodichloride 9124.
- antiviral activity, interferon, cell culture 7389.
- assays, use, poly(I-C) 5890.
- defective interfering particles detection, DNA hybridization analysis probes 4367.
- 6-diazo-5-oxo-L-norleucine, 2-deoxy-D-glucose, effects on, replication 9127.
- enumeration, methodology, mathematical models 1559.
- infected cells, α -interferon effects on protein biosynthesis 6470.
- infection, cell culture, 9-(2,3-dihydroxypropyl)adenine antiviral activity 465.
- infection, insecticides, emulsifiers, solvents, effects on, mammalian cells, cell culture 2434.
- infection, interferon antiviral activity, HeLa cells, mice L cells 1350.
- interferon antiviral activity, bioassays, in vitro 4473.
- interferon, antiviral activity, cell culture, mice 2226.
- L cells, interferon induction, antiviral activity 467.
- replication, antiviral activity, cyclosporin A, cell culture 8330.
- replication, HeLa cells, nucleotides, antiviral activity 8334.
- ribonucleoside-diphosphate reductase, DNA biosynthesis, inhibition, antiviral activity, paracetamol, bis-N₁,N₆-(2,3-dihydroxybenzoyl)spermidine 8335.
- Vesicular-arbuscular mycorrhizas**, + *Asporium brassicae*, inoculation, nitrogen fixation, nutrient uptake, yield, *Leucaena leucocephala* 1257.
- + *Azotobacter chroococcum*, nitrogen fixation, seedlings inoculation, yield, *Leucaena sativa* 6375.
- colonization, *Allium cepa* growth, phosphorus availability, water availability 3947.
- colonization, organic matter 6344.
- colonization, roots, fruit trees 5619.
- competition, *Glomus tenue*, *Glomus fasciculatum*, *Gigaspora decipiens*, inoculum potential, plants 8973.
- determination, plants, Argentina, soil types association 3939.
- ecological evaluation, deserts, semiarid environments, USA, California 8222.
- effects on development, Heliotropium Fuchsia 2811.
- effects on nutrient uptake, ammonium sulfate, nitrogen sources, *Sorghum bicolor* 8215.
- enumeration, most probable number 2124.
- formation, rhizosphere temperature effects on, forests soil 5549.
- fungi, inoculation, Elaeusine coracana, greenhouses screening 2145.
- Glomus lutea*, symbiosis, detection 2131.
- Gigaspora erythropha* sp. nov., soil isolates 6349.
- Gigaspora margarita*, growth, in vitro, tissue culture, *Prunus avium* 5926.
- Gigaspora margarita*, sporulation, colonization roots, pure culture, *Lycopodium esculentum* 6481.
- Glomus californicum*, *Glomus epigaeum*, inoculum density, effects on nutrient uptake, *Zeranol repens* 8214.
- Glomus epigaeum*, *Glomus mossae*, soil temperature effects on colonization, USA, Kansas, *Triticum aestivum* 7259.
- Glomus fasciculatum*, inoculation, yield, citrus 3932.
- Glomus fasciculatum*, pH, ammonium nitrate ratio effects on, phosphorus, nutrient uptake, roots colonization, *Chrysanthemum morifolium* 5642.
- Glomus fasciculatum*, stimulation growth, nutrient uptake, *Arachis hypogaea* 5641.
- Glomus fasciculatus*, \pm *Rhizobium*, inoculation, yield, *Leucaena leucocephala* 7276.
- Glomus fasciculatus*, inoculation, + fertilization, effects on growth, *Fraxinus americana*, *Juglans nigra* 7229.
- Glomus fasciculatus*, inoculation, growth stimulation, *Chrysanthemum morifolium* 1269.
- Glomus fasciculatus*, phosphate nutrient uptake, interaction actinorrhizas nitrogen fixation, *Hippocrepis rhamnoides* 8243.
- Glomus*, inoculation, nutrient uptake, growth, *Hordeum vulgare*, *Zea mays*, *Pisum sativum* 7257.
- Glomus intraradices*, nutrient uptake, phosphorus, water conductivity, transpiration, *Citrus* 8216.
- Glomus macrocarpum*, soil aeration, carbon dioxide effects on symbiosis, *Eupatorium odoratum*, *Guzutia abyssinica*, *Sorghum bicolor* 3937.
- Glomus macrocarpus*, infection, daylength effects on, *Eupatorium odoratum*, *Guzutia abyssinica* 8977.
- Glomus macrocarpus*, infection, light intensity effects on, *Eupatorium odoratum*, *Capitulum annuum* 9815.
- Glomus macrocarpus*, inoculation, soil temperature, oxygen effects on, growth, *Eupatorium odoratum* 7256.
- Glomus manihoti*, inoculation, fertilizers requirements, yield, *Manihot esculenta* 2934.
- Glomus mossae*, effects on copper uptake, *Allium porum* 384.
- Glomus mossae*, inoculation, stimulation phosphorus uptake, seedlings growth, *Malus domestica* 3942.
- Glomus mossae*, nitrogen uptake, *Apium graveolens* 1259.
- Glomus mossae*, phosphate fertilizers interaction, effects on *Medicago sativa* 3946.
- Glomus mossae*, resistance, *Allium cepa*, heavy metals soil pollution 363.
- Glomus mossae*, roots, carbon sources, phosphate, roots, mycelia, *Acer pseudoplatanus* 5555.
- growth stimulation, roots density, soil volume inhibitor, *Allium cepa* 5643.
- identification, use, fluorescent antibody test 3360.
- infection, plants roots, statistical analysis 1254.
- infectivity, phosphate soil amendment, seasonal variations, *Trifolium subterraneum* 2144.
- inhibition, fertilizer applications + composts, effects on yield, *Zea mays* 3948.
- inoculation, crop fields soil, field trials 7253.
- inoculation, effects on *Fraxinus americana* seedlings growth 5548.
- inoculation, effects on *Rhizobium meliloti*, nitrogen fixation, phosphorus, nutrient uptake, *Medicago sativa* 8221.
- inoculation, effects on *Verticillium albo-atrum*, wilt, *Lycopodium esculentum* 1205.
- inoculation, growth stimulation, soils (saline), *Lycopodium esculentum* 5616.
- inoculation, plants, reviews, methodology 827.
- inoculation, stimulation growth, latex levels, *Parthenium argentatum* 5622.
- inoculum potential, colonization, roots density, *Trifolium subterraneum*, *Medicago truncatula* 8217.
- Vesicular-arbuscular mycorrhizas**, (continued)
inoculum potential, *Gigaspora decipiens*, *Glomus fasciculatum*, *Glomus tenue*, plants 8972.
- inoculum production, *Allium cepa* 6432.
- inoculum production, reviews 826.
- interaction, soil-borne diseases fungi, *Nematoda* plants pathogens, reviews 392.
- interspecific relationships, *Atriplex confertifolia* 382.
- Meloidogyne incognita*, mixed infection, phosphorus interaction, *Lycopodium esculentum* 371.
- microwave radiation soil effects on 3361.
- mixed culture, methodology, reviews 828.
- montane environments, grasslands, phosphorus uptake 1260.
- mycelia, nutrient uptake, tropical environment, forests 5576.
- nutrient uptake, soil aeration effects on, *Eupatorium odoratum*, *Sorghum bicolor*, *Guzutia abyssinica* 1256.
- plants response association, environmental effects, reviews 390.
- plants roots, measuring techniques, reviews 825.
- propagules, isolation methodology, measuring techniques, soil, reviews 824.
- protection *Phytophthora fragariae*, red core, *Fragaria vesca* 5448.
- restoration, soil storage, land reclamation, gravel pits 1253.
- + *Rhizobium* inoculation, *Trifolium repens*, nodulation, fertilizers effects on, nodulation 5628.
- + *Rhizobium meliloti*, effects on growth, *Medicago sativa* 6341.
- roots colonization, *Malus domestica* 8218.
- roots colonization, phosphate, nutrient uptake, crops 5620.
- roots colonization, phosphate, nutrient uptake, physiology, trees 5554.
- roots colonization, population levels, plantations, *Coffea arabica* 5626.
- roots colonization, seasonal variations, environmental factors, *Atriplex gardneri*, deserts 385.
- roots colonization, soil pH, calcium oxide soil amendment effects on, *Zea mays* 5629.
- + roots, comparison, vesicles, use, inoculum 2153.
- roots infection, growth rate, models, *Trifolium subterraneum* 3933.
- roots infection, Leguminosae, Malaysia 8164.
- soil fumigation effects on 7298.
- Sorghum vulgare*, phosphorus effects on 8200.
- spore germination, growth, factors affecting, reviews 391.
- spore germination, hyphae growth, temperature effects on 402.
- spores levels, phosphate nutrient uptake, yield, soils (sandy), *Anacardium occidentale* 7269.
- sporulation, phosphate soil amendment induction, *Paspalum notatum* 2134.
- stimulation anions nutrient uptake, growth, *Triticum aestivum*, *Hordeum vulgare* 5623.
- symbiosis, Asteraceae, Australia 2132.
- symbiosis, plant cells culture systems, aspepsis 2120.
- symbiosis, plants, effects on, measuring techniques, reviews 389.
- symbiosis, seedlings, *Citrus aurantium*, *Poncirus trifoliata* \times *Citrus sinensis*, association, photosynthates distribution 8219.
- symbiosis, *Trifolium*, competition 3935.
- symbiosis, weeds, association, habitat disturbance, USA, Utah 396.
- vertical distribution, irrigation, water salinity effects on, *Citrus* 1255.
- Veterinary medicine**, pharmaceuticals, sterility testing, membrane filtration, viruses 7395.
- Vibrio**, antibacterial activity, ciprofloxacin 7444.
- antibacterial activity, mangostin, derivatives, isolation, *Garcinia mangostana* 4783.
- antibiotic resistance, ampicillin 8293.
- drug resistance plasmids incidence, *Salmo gairdneri* isolates 9072.
- exotoxins, characterization 5391.
- identification, AutoMicrob test 1645.
- identification, serological surveys, antisera 1590.
- indicator species, population levels, water temperature, rivers, estuaries 4131.
- isolation, media (isolation), quality control, statistical analysis 1622.
- siderophores biosynthesis 867.
- Vibrio alginolyticus**, heat production, calorimetry methodology 3278.
- Vibrio anguillarum**, effects on *Desulfotribium vulgaris* steel corrosion 2722.
- R factors, drug resistance 3969.
- Vibrio cholerae**, ADP-ribosyl transferase, nucleotide sequence, amino acid sequence, biosynthesis, comparison, *Escherichia coli* 7120.
- antibiotic resistance 6442.
- antigen O, lipopolysaccharides structure 3529.
- antigen O, oligosaccharides structure 1825.
- cell surface antigens, enzyme-linked immunosorbent assay methodology 1624.
- chemotaxis, distilleries, effluents, coastal waters 560.
- contamination, *Crossostoma virginica*, isolation methodology 5088.
- detection, indirect fluorescent antibody test, aquatic environment 9286.
- drug resistance, nitrofurantoin, histidine ammonia-lyase induction 3037.
- enterotoxins detection, nitrocellulose enzyme-linked immunosorbent assay 4179.
- enumeration, seasonal variations, coastal waters, USA, California 6715.
- β -D-galactosidase activity, glucose effects on 8609.
- hemolysis detection, use, *Streptococcus* β -hemolysin 9288.
- indicator species, microbial pollution, sewage outfalls, coastal waters 6711.
- isolation, media (isolation), quality control, statistical analysis 1622.
- like toxins, *Campylobacter*, genes probes 5389.
- like toxins, *Campylobacter jejuni* production 6210.
- metalloproteinase, purification, characterization 34.
- microbial pollution, estuaries 6713.
- plasmids, gene transfer, antibiotic resistance, clinical isolates, man, India, Tamil Nadu 6400.
- radioimmunoassay, detection, enterotoxins, production 3272.
- serum bactericidal activity, measuring techniques, bioluminescence 489.
- Shigella dysenteriae* like toxins, biosynthesis 3758.
- streptomycin resistance induction, furazolidone mutation 3993.
- toxins, A1-subunit, ADP-ribosylation sites, amino acid sequence⁺ 1085.
- toxins, peptide synthesis, toxoids conjugate, antisera production, vaccines 4078.
- toxins, reviews 2768.
- toxins, synthetic antigens, vaccines 6654.
- vaccines, production, characterization 541.

- Vibrio fluvialis**, isolation, media (isolation), quality control, statistical analysis 1622.
- Vibrio harveyi**, 3'-5' cyclic-nucleotide phosphodiesterase, thin-layer chromatography 3279.
- Vibrio mimicus**, clinical isolates, enterotoxins purification, characterization 8750.
- Vibrio natriegens**, cell culture, growth, computer applications, monitoring, control 3326.
- Vibrio parahaemolyticus**, detection, media (selective) 777, isolation, antibiotic sensitivity testing, otitis media, man 3094, isolation, marine environment, media (enrichment), media (isolation) 7619, isolation, media (isolation), quality control, statistical analysis 1622, isolation, seafood, growth optimization 194, microbial pollution, estuaries 6713, *Shigella dysenteriae* like toxins, biosynthesis 3758.
- Vibrio vulnificus**, hemolysins production, factors affecting, bioassays 6786, isolation, media (isolation), quality control, statistical analysis 1622, phospholipase A2, lysophospholipase, purification, characterization 7676.
- Vibrionaceae**, animal isolates, antibiotic sensitivity testing 477, lipopolysaccharides, 3-deoxy-D-manno-2-octulosonic acid derivatives 5200.
- Vibrio parahaemolyticus**, food contamination, seafood, Pisces 8712.
- Vicia faba**, *Botrytis fabae* chocolate spot, pectinolytic enzymes, phytotoxins, effects on pathogenesis 3794, *Botrytis fabae* infection, humidity effects on pathogenesis 5413, disease resistance plant breeding screening projects, bean yellow mosaic virus 3873, disease resistance, *Uromyces viciae-fabae* 1198, disease spread, subterranean clover red leaf virus, bean yellow mosaic virus, epidemiology, vectors, Aphididae 5405, flowers, mycoflora, beans aflatoxins contamination, Egypt 7085, infection, etiology, *Botrytis cinerea*, *Botrytis fabae* 1970, leaf rust, pathogenesis, *Uromyces viciae-fabae* urediniospores, nutrient requirements 5408, plant breeding, disease resistance, rust, *Uromyces viciae-fabae* 2882, plant diseases, books 4236, reproduction, yield, inhibition, infection, bean yellow mosaic virus, *Echtes Ackerbohnen*-mosaic virus, pea leaf roll virus 7938, residue biodegradation, soil phosphate availability 3568, rust, *Uromyces fabae*, triadimefon, antifungal activity 3901, rust, *Uromyces viciae-fabae*, *Puccinia recondita*, triadimefon effects on ultrastructure 8131, seed-borne diseases, *Ascochyta fabae* 7136, straw, composts, thermophilic fungi 6168, *Uromyces viciae-fabae* infection, *Cryptococcus synergism* 7135.
- Victor**, purification, high-pressure liquid chromatography, U.V. spectroscopy, *Bipolaris victoriae* 7910.
- Vicetioxine**, derivatives, isolation, N.M.R., toxins, Helminthosporium victoriae 3733.
- Vidarabine**, antiviral activity, *Eucaliella cavolinii* isolates 9128, antiviral activity, herpes simplex virus 2 9114, drug resistance, herpes simplex virus, cytarabine incorporation DNA association 3067, +9-(2-hydroxyethoxymethyl)guanine, antiviral activity, DNA biosynthesis, herpes simplex virus 1 7388.
- Vigna acotifolia**, seed-borne fungi, seed-borne diseases, seed treatments, captan, carbendazim 8143.
- Vigna mungo**, nodules, *Rhizobium*, rhizosphere, inhibition, *Streptomyces* 6378, plant viruses infection, metabolites concentration 2776.
- Vigna radiata**, biomass, yield, growth, bean common mosaic virus, nitrogen, effects on 4511, hydrogenase activity, *Rhizobium* 4664, mung bean yellow mosaic virus, Aleyrodidae vectors, insecticides, chemical control 2055, nitrogen fixation, *Rhizobium*, soil moisture effects on 4640, nodulation, *Rhizobium* 6360, nodulation, *Rhizobium*, efficiency correlation antibiotic resistance 4662, phylloidy, mycoplasma-like organisms, leaves lesions, ultrastructure 8773, plant breeding, disease resistance, urbean leaf crinkle virus 2071, plant viruses infection, metabolites concentration 2776, Rhizobium symbiosis, environmental stress effects on nitrogen fixation 5679, seed rot, *Phoma exigua*, pectinolytic enzymes, production 3797.
- Vigna sinensis**, cowpea chlorotic mottle virus infection, RNA polymerase (RNA-dependent) activity 4508, dark effects on susceptibility, cowpea mosaic virus, infection 6223, inoculation, nitrogen fixation, *Rhizobium* 8999, leafspot, *Septoria vignicola*, pathogenesis, role, relative humidity 8779, leaves, lesions, alfalfa mosaic virus 8857.
- Vigna unguiculata**, *Aspergillus parasiticus* infection, aflatoxins production, Tanzania 3795, cowpea banding mosaic virus, disease control, heat treatments, seed treatments 2095, cowpea chlorotic mottle virus infectivity, symptoms, antiviral agents foliar applications effects on 3903, cowpea mosaic virus, disease transmission, vectors, *Bemisia tabaci* 3784, cowpea mosaic virus, incidence, vectors, *Bemisia tabaci*, population density, seasonal variations 3783, damping-off, fungicides disease control, herbicides soil applications effects on 2030, disease resistance, blight, *Xanthomonas campestris* pv. *vignicola* 8891, disease resistance plant breeding 8898, disease resistance, tobacco necrosis virus, sunn-hemp mosaic virus, nutrition effects on 312, fertilizer applications effects on nodulation, inoculation, *Rhizobium* 2983, growth, *Fusarium oxysporum* + sunn-hemp mosaic virus mixed infection effects on 5407, hydrogenase activity, *Rhizobium* 4664.
- Vigna unguiculata, (continued)** incidence, plant viruses infection, USA, South Carolina 8777, infestation resistance, *Aphis craccivora* vectors, cowpea aphid-borne mosaic virus disease transmission 7137, inoculation, *Glomus fasciculatum* + *Rhizobium*, + phosphate 2945, leaf characters, shoots weight, relationship, nitrogen fixation, genotypes screening association 9000, leaves, hypersensitive response, *Xanthomonas campestris* pv. *oryzae* 6230, leaves, plant viruses infection, RNA replication, actinomycin D sensitivity 7931, mesophyll cells, infection, tobacco mosaic virus, tobacco necrosis virus, pathogenesis 6225, modulation, *Bradyrhizobium japonicum* 5664, *Myrothecium roridum* infection, leaves amino acid composition 1977, nodulation, *Rhizobium*, soil acidity effects on 8993, nodulation, soil temperature tolerance, dessication, tropical environment, soil isolates, *Rhizobium* 8241, nodules, *Bradyrhizobium* 6364, nodules, *Rhizobium* bacteroids, nitrogenase, acetylene reduction, oxygen effects on 7291, plant breeding, nitrogen fixation 1271, plant diseases, cowpea severe mosaic virus serotypes 6224, plant diseases, *Fusarium oxysporum*, mixed infection, sunn-hemp mosaic virus, pathogenesis, scanning electron microscopy 6236, protoplasts, cowpea mosaic virus interaction 247, *Rhizobium*, γ radiation effects on, soils (acid) 2951, *Rhizobium* leguminosarum, morphology, antibiotic resistance 9013, *Rhizobium*, nitrogen fixation, characterization 9019, *Rhizobium*, nitrogen fixation, nitrogenase, temperature effects on 2168, rhizosphere, bacteria population levels 7264, seedlings, mixed infection, *Fusarium oxysporum* + sunn-hemp mosaic virus, nutrition effects on pathogenesis 6234, southern bean mosaic virus strains isolation, pathogenicity, temperature role 27, varieties, nitrogen fixation, *Rhizobium* 4645, *Xanthomonas campestris* pv. *vignicola* blight, incidences 8231, yield, *Rhizobium* inoculum, carriers, bagasse, soil 2982.
- Vinca rosea**, infection, *Spiroplasma citri*, pathogenesis, antigens, antisera 1968.
- Vincetoxicum officinale**, infection, *Cronartium flaccidum*, sporulation, teliospores, urediniospores, environmental factors effects on 3927.
- Vincetoxin**, antifungal activity, resistance, *Aspergillus nidulans*, *Cladosporium cucumerinum*, *Penicillium italicum* 8296, disease control, *Phytophthora cactorum* fruit rot, *Botrytis cinerea* grey mold, *Fragaria chiloensis* 7214, disease control, *Sclerotinia sclerotiorum*, *Phoma lingam*, stalk rot, *Brassica napus* 2903, pesticide resistance, *Sclerotium cepivorum* 5529.
- Vinegar**, production, *Acetobacter aceti* fermentation, sap, *Nypha fruticans* 6999.
- Viologen**, reduction flavodoxin, pulse radiolysis, *Megasphaera elsdenii* 858.
- Viomeloin**, *Penicillium*, contamination, *Hordeum vulgare*, nephropathy, pigs 224.
- Virazole**, rabies virus antiviral activity 4765.
- Virginiamycin**, antibacterial activity, *Clostridium*, agar dilution test, animal isolates 3050, antibiotic A2315A, biosynthesis, actinomycetes 9210, antibiotic sensitivity testing, *Escherichia coli*, *Pseudomonas aeruginosa* 9215, binding ribosomes, pH, ions effects on 8376, biosynthesis, N.M.R. 532, feeds, *Salmonella typhimurium* experimental infection, pigs, antibacterial activity 4666, residues, feces, inhibition methanogenesis, digestion (anaerobic) 8396, *Streptomyces virgineae*, biosynthesis 1423.
- Vitricides**, antiviral activity, methodology 1348.
- Vitroids**, detection, plants, electrophoresis methodology 4152, plant diseases 7919.
- Vulence**, *Alternaria helianthi*, blight, *Helianthus annuus* 8033, *Bacillus sphegnis*, biological control, *Simulium damnosum* 5261, barley stripe mosaic virus, *Avena fatua* 6241, black rot, *Arachis hypogaea* genotypes comparison, plant breeding 8084, *Cochliobolus victoriae* conidia, soil, plant diseases 1090, *Cryphonectria parasitica*, conversion, *Castanea dentata* isolates, blight biological control 6326, *Cryphonectria parasitica*, conversion, *Castanea dentata* isolates, blight biological control 6327, *Endothia parasitica*, conversion, double stranded RNA elimination, *Castanea sativa* blight biological control 6329, *Endothia parasitica* killer factor, double-stranded RNA, biological control, blight, *Castanea dentata* 8638, *Erwinia amylovora*, *Malus pumila*, characterization 2803, *Erwinia carotovora* subsp. *carotovora*, pathogenesis, *Solanum tuberosum*, stems 2817, *Fusarium*, *Puccinia graminis*, *Puccinia recondita*, races, host-pathogen interactions, disease resistance genes, plant breeding, *Triticum aestivum* 2858, genes, *Puccinia graminis* f.sp. *tritici*, association, stem rust, geographical distribution 7972, genetic variance, relationship, weed control, biological control, phytopathogenic fungi 3893, *Geotrichum candidum*, plant diseases, extracellular enzymes activity 7128, host-pathogen interactions, plant diseases 8765, *Hyphoxylon mammatum*, stem canker, *Populus tremuloides* 8174, microorganisms, plant diseases, pathology, reviews 4492, plasmids characterization, *Yersinia enterocolitica* 6781, *Puccinia graminis* f.sp. *secalis* races, *Secale cereale*, North America 265, *Puccinia graminis* f.sp. *tritici*, rust, association, gene expression, geographical distribution 7922, *Puccinia graminis* f.sp. *tritici*, stem rust, genes, plant breeding, *Triticum aestivum* 4239, *Septoria nodorum*, *Hordeum vulgare*, *Triticum aestivum* 7148.

Uromyces appendiculatus monokaryons comparison dikaryons. *Phaseolus vulgaris*

2790s
 Myxobolus phaseoli races, rust, disease resistance, *Phaseolus vulgaris* 2846.
 Yersinia, bioassays, agglutination 6758.
 Yersinia enterocolitica, measuring techniques, Congo red agar 749.
Virus-like particles,
 cherry leaf roll virus, localization, pollen, anthers, transmission (vertical),
 Prunus avium, Betula pendula, Juglans regia 7990.
etiology, cotton leaf crumple disease, Gossypium hirsutum, Malva parviflora,
Phaseolus vulgaris, Arizona, epidemics 8814.
 green ring mottle, infection, Prunus, ribavirin foliar applications effects on
 3002.
infection, Gramineae, Australia 1988.
Viruses,
 adsorption, ghosts, isolation, water 6750.
 antisense genes cloning, vaccines production, genetic engineering 5807.
 antigens, immune response, vaccines development association, man 3178.
 antiviral agents, structure, resistance, antimicrobial activity, reviews 2234.
 Apis mellifera, antisera production 5891.
 9-D-arabinofuranosyladenine, analogs, antiviral activity 6478.
 biological control, insects 8639.
 biological control, insecta, reviews 7772.
 biological control, pest control, insecta 1844.
 Bivalvia carriage, public health risks, aquaculture, reviews 2386.
 cloning vectors, books 842.
 concentration, comparison, filters, waste water, methodology 4952.
 concentration, filtration methodology, water 9283.
 crops plant diseases, control, ecological evaluation, reviews 3764.
 culture collections, media (transport) methodology 2442.
 detection, drinking water 7533.
 detection, identification, waste water, New Zealand 3219.
 detection methodology, man 4158.
 detection, plants, electrophoresis methodology 4152.
 detection, use, potato virus Y monoclonal antibodies, characterization 2432.
 disease resistance, plant breeding, Glycine 5473.
 disease resistance plant breeding, Sorghum 8897.
 disease transmission, Cicadellidae, reviews, Oryza sativa 7156.
 disease transmission, reviews, Rubus 8004.
 disinfectants, wastewater treatment, chlorine, residues 4938.
 DNA, genetic engineering, vaccines, reviews 6386.
 DNA, silver staining, methodology 654.
 double-stranded RNA, role virulence, Entomophthora aegressa, biological control,
 Chonostoeura 8634.
 drinking water analysis, Canada, urban environments 4955.
 drinking water, recovery methodology 2393.
 electron microscopy, detection, antigen-antibody complexes 653.
 detection, immunoelectron microscopy methodology, association
 gastroenteritis, neonates, man 3252.
 food contamination, USSR 202.
 food-borne diseases, prophylaxis, hand disinfection, man 9266.
 genetic engineering, vaccines, conferences 6800.
 grids, rotation, effects on, immunoelectron microscopy, magnetic fields 9273.
 hepatitis B virus, association, nephrotic syndrome, etiology, immune adherence,
 immunoassays 3251.
 hepatitis B, infection, laboratories, man 2414.
 hepatitis, vaccines, standardization, books, conferences 4245.
 host-pathogen interactions, host plants, genetic analysis, host specificity 8767.
 identification, fruit trees, Japan 3811.
 inactivation, antiviral agents, genetic diseases 1347.
 inactivation methodology, interferon assays preparation 8459.
 inactivation, peracids antiviral activity 470.
 inactivators proteins, purification, characterization, electron microscopy,
 Bombyx mori 9113.
 indicator species, pollution control, water reclamation 2394.
 infection, *Calendula officinalis* root 4547.
 infection, *Chlorella* cell culture, plaque assay development 592.
 infection, diagnosis, chemiluminescence enzyme-linked immunosorbent assay 1562.
 infection, germplasm, *Solanum tuberosum* 8882.
 infection, interferon antiviral activity, HeLa cells, mice L cells 1350.
 infection, iris, detection, use, electrophoresis 8616.
 infection, leaves, myopathology, *Pistia abies*, *Pinus sylvestris* 6325.
 infection, man, antiviral agents, treatment 2229.
 infection, pollen morphology 1108.
 infection, Primates, detection, methodology 9274.
 infection, *Trifolium repens*, pathogenesis, Canada 2778.
 inhibitors, antiviral activity, characterization 5744.
 interferon, antiviral activity, characterization, reviews 8327.
 interferon antiviral activity, respiratory tract isolates, cattle 4759.
 isolation, cell culture, bacteria contamination prophylaxis, use, penicillin,
 comparison, vancomycin 1557.
 isolation enhancement, fibroblasts monolayers 4982.
 isolation, identification, methodology 3231.
 levels, association, chlorination, water treatment, reduction, trihalomethanes
 3206.
 levels, detection methodology, surface water, drinking water, reviews 2384.
 levels standardization, waste water, disease transmission, reviews 2334.
 levels, wastewater treatment association aquaculture, Hypophthalmichthys
 molitrix, *Antistichys nobilis* 1463.
 man, feces, separation techniques, potassium tartrate + glycerol density gradients
 1555.
 microbial pollution, adsorption, survival, temperature effects on, ground water
 5858.
 microbial pollution, environmental monitoring, measuring techniques, reviews
 2387.
 microbial pollution, public health risks, standards, environmental monitoring,
 reviews, books 2537.
 microbial pollution, rivers, Romania 2406.

microbial pollution, sewage sludge, effluents, land disposal, reviews 2335.
microbial pollution, waste water aerosols irrigation, public health risks,

non-A, non-B hepatitis, enzyme-linked immunosorbent assay 6748.
pathogens, public health, sewage sludge, land disposal 2367.
pathogens, public health, sewage sludge, land disposal 2367.
pharmaceuticals sterilization 9144.
plant diseases, *Citrus macrophylla*, *Glomus etunicatus* symbiosis effects on pathogenesis 4635.
plant diseases, conferences 9350.
plant diseases, etiology, pathology, *Phaeosorus limensis* 8775.
plant diseases, *Fragaria*, books 1687.
plant diseases, research programs 1099.
plant diseases, *Solanum tuberosum*, books 3380.
plant diseases, *Vicia faba*, books 4236.
plaque assay, cells transformation assays, use, tetrazolium blue staining 9275.
production, vaccines, antisera, immune serum globulin, industrial applications 9218.
purification methodology, cesium chloride density gradients 642.
 γ radiation inactivation, manure, pigs 4067.
recovery, activated sludge 548.
recovery, activated sludge, waste water effluents 4956.
replication, 2-bromo-2-chloro-1,1,1-trifluoroethane, effects on 6474.
RNA, pyrazofurin, antiviral activity 4020.
sewage treatment, public health 2363.
solid wastes, disease transmission, *Rodentia*, *Diptera*, public health 2361.
sorption, soil, waste water, applications 3931.
sterility testing, membrane filtration, pharmaceuticals, veterinary medicine 7395.
survival, sewage sludge disposal sites, Atlantic Ocean 9242.
synthetic antigens, vaccines, production methodology 6625.
use, DNA recombination, methodology 841.
vaccines development, biotechnology, immunological aspects 7483.
vaccines, genetic engineering 4073.
vaccines production, fermenters, chick embryos cells growth optimization 4077.
vaccines production, genetic engineering, bacteria 4075.
vaccines production, reviews 7480.
vaccines production, reviews 9220.
vaccines production, veterinary medicine, reviews 5806.
water pollution, rivers, Japan 8423.
water quality, rivers, sewage effluents 9254.

Virustomycin A,
structure 3165.

Viscaria vulgaris,
host-pathogen interactions, *Ustilago violacea*, models, islands biogeography 3840.

Vitamin B complex,
levels, corn meals, fermentation, lactic acid bacteria 5356.

Vitamine,
effects on yeasts growth, association wine 7869.
excretion, soil, *Azotobacter vinelandii* 1266.
levels, corn meals, fermentation, lactic acid bacteria 5356.
nutrient requirements, media (culture), *Bacillus thuringiensis* subsp.galleriae 7603.
pharmaceuticals production, fungi, bacteria 8651.
single-cell protein, thermophilic fungi 860.
starter cultures, effects on growth, *Laussonotus oenos* 5269.

Vitis,
hosts, tobacco ringspot virus, tomato ringspot virus 3818.
powdery mildew, *Uncinula necator*, association, yield, growth, wine quality, USA, New York 8833.

Vitis amurensis,
× *Vitis vinifera*, plant breeding, disease resistance, crown gall,
Agrobacterium tumefaciens 8906.
× *Vitis vinifera*, plant breeding, inheritance, disease resistance, crown gall, *Agrobacterium tumefaciens* 8908.

Vitis rotundifolia,
rot, *Colletotrichum gloeosporioides*, pathogenesis, disease control 8006.

Vitis vinifera,
Agrobacterium crown gall, epidemiology, Afghanistan 1151.
bunch rot, factors affecting pathogenesis, *Ecthyria cinerea* 2041.
clones, yield, leaf-roll, genetic variance, effects on 8859.
crown gall, *Agrobacterium*, etiology 3848.
crown gall, *Agrobacterium tumefaciens* 279.
cultivars, plant breeding, disease resistance, Pierce's disease, yield 8064.
cultivars, plant breeding, disease resistance, Pierce's disease 8068.
cell, *Pythium ultimum*, disease control, etiole-AT, metalaxyl, mancozeb 8122.
Eutypa armeniacae dieback, spores dispersal 1152.
foliar diseases, phytopathogenic fungi, seasonal variations 8016.
host specificity, *Agrobacterium rhizogenes* 269.
× *Muscadinia rotundifolia* hybrids, cross-breeding, phytophthora resistance 3832.
pathogenesis comparison, grapevine mottle virus, grapevine vein mosaic virus, symptoms 3816.
plant breeding, disease resistance, host-pathogen interactions, phytopathogenic fungi 2869.
plant diseases, grapevine leaf roll virus, growth, yield 4536.
plant diseases, grapevine viruses A, disease transmission, vectors, *Pseudococcus longispinus* 3544.
powdery mildew, sulfur applications, disease control 340.
× *Vitis amurensis*, plant breeding, disease resistance, crown gall,
Agrobacterium tumefaciens 8906.
× *Vitis amurensis*, plant breeding, inheritance, disease resistance, crown gall, *Agrobacterium tumefaciens* 8908.
wilt, gram-negative bacteria, pathogens, colonial characteristics 280.
wilt, *Phaeoelasma ampelimum* anthracnose 2029.

Volutella,
soil, microorganisms 7261.

Volcanic ash,
soil microorganisms 7261.

Vovariella volvae,
exo-1,2,1,3- α -D-mannosidase production 6873.

- Vomitoxin**,
 biosynthesis, *Fusarium solani* var. *coeruleum*, potatoes 5372.
 feeds contamination, pregnancy, pigs, effects on fetuses 2748.
 food contamination, food processing, flour 3737.
 food contamination, wheat 7098.
Fusarium graminearum, levels, food contamination, flour, *Hordeum vulgare* 2737.
Fusarium, structure 1930.
 gas chromatography, food contamination, grain, *Hordeum vulgare* 7107.
 incidence, wheat 1927.
 levels, food processing effects on, flour, wheat 7890.
 production, liquid culture, *Fusarium graminearum* 2755.
- Vulpine vulpes**,
 vaccines production, immunogenicity, rabies virus strains 6629.
- Weitzae**,
ectomycorrhizas symbiosis, Australia 2132.
- Wangielia dermatidis**,
 pathogens, isolation, feeds, storage buildings 582.
- Washing**,
 laundry, bacteria enumeration, hospitals 3226.
 neonates, relationship, skin microflora, bacteria infection, man 6729.
- Waste disposal**,
 environmental hygiene, conferences 2548.
 environmental hygiene, pathogens, hospitals 2359.
 hospitals wastes, pathogens, sanitation 1520.
 industrial wastes, role, microorganisms, reviews 6704.
 landfills, leachates, public health, *Mycobacterium*, *Streptococcus* 3198.
- Waste disposal sites**,
 mining, land reclamation, soil microorganisms 4676.
- Waste treatment**,
 activated sludge, pentachlorophenol containing synthetic wastes, use, *Arthrobacter* 559.
 animal wastes, methanogenesis 2339.
 carbon (activated), aeration, filters, microorganisms 6698.
 chickens manure, methanogenesis, digestion (anaerobic), immobilized cells 7518.
 composting, industrial wastes, food processing 6682.
 composting, Japan, biotechnology 4923.
 composting, soil decontamination, biodegradation, 2,4,6-trinitrotoluene, hexahydro-1,3,5-trinitro-1,3,5-triazine 7511.
 degradation, genetic engineering, microorganisms, research programs 4088.
 digestion (aerobic), manure 9230.
 digestion (anaerobic), glucose, bicarbonate, acetic acid, effects on 3191.
 digestion (anaerobic), manure, cattle 9226.
 digestion (anaerobic), mass spectroscopy, monitoring, methanogenesis 1458.
 digestion (anaerobic), microorganisms, ethanol, production, methodology, books, conferences 6500.
 feeds, microorganisms 5351.
 food processing by-products, microorganisms 5320.
 gases, use, microorganisms growth filters, organic compounds removal 3188.
 hazardous wastes, microorganisms use, books 1694.
 industrial wastes, conferences 4244.
 industrial wastes, digestion (anaerobic), digestion (aerobic), enzymes, microorganisms 547.
 industrial wastes, organic compounds, biodegradation, microorganisms 1015.
 industrial wastes, toxicants, use, biotechnology, methodology 8398.
 land disposal, oil and gas industry industrial wastes, biodegradation, soil microorganisms 2178.
 landfills, bacteria, methanogenesis 1457.
 lipids emulsions, activated sludge 3195.
 manure, starter cultures, methanogenesis 2340.
 methanogenic bacteria, digestion (anaerobic), fluorescence, monitoring 4104.
 organic compounds 9238.
Saccharomyces fibuliger, growth, pectin, biodegradation 7831.
 sedimentation, equipment, agitation, vessels 5849.
 sewage sludge, thermophilic microorganisms 1465.
 sewage sludges, carbon (activated), assays, biomass suspended matter 2379.
 use, genetic engineering microorganisms 4126.
 use, genetic engineering microorganisms 4127.
 use, microorganisms genetic engineering, books, conferences 3392.
- Waste water**,
 aerosols irrigation, viruses microbial pollution, public health risks, reviews 2336.
 applications, soil, viruses, sorption 3931.
 biochemical characteristics, microorganisms, wastes, biochemical oxygen demand, chemical oxygen demand, measuring techniques, enumeration, reviews 4918.
 biochemical oxygen demand assays, nitrification inhibitors, 2-chloro-6-(trichloromethyl)pyridine 1476.
 chemical analysis, electrodes, immobilized cells 768.
 coliforms enumeration methodology, U.V. radiation disinfection 9263.
 coliforms monitoring methodology 9257.
 coliforms monitoring methodology 9258.
 denitrification, *Hypochromobacterium* growth, methanol carbon sources 1492.
 disinfection, reviews 1478.
 effluents, viruses recovery, activated sludge 4956.
 Enterobacteriaceae isolation, gentamicin antibiotic resistance, plasmids transmission 9076.
 enterovirus levels, measuring techniques 7532.
 filters, comparison, concentration, viruses, methodology 4952.
 infiltration, pollutants biodegradation, indigenous species, ground water, bacteria 5813.
 irrigation, agriculture, coxsackievirus B5 seroepidemiology, occupational exposure, man 4096.
 irrigation, crop fields, soil properties, bacteria, characterization 4924.
 irrigation, dispersal, bacteria, airborne microorganisms 1456.
 irrigation, microbial pollution, enterovirus, ground water 5852.
 isolation, enterovirus, use, mammalian cells, cell lines 4150.
 land disposal, reviews, bibliographies 4910.
 marine environment, indicator species, inactivation 1499.
 methanogenesis, immobilized cells, bacteria, reactors 419.
 microorganisms, removal, nutrients, heavy metals 3202.
 nutrients removal, nitrogen, phosphorus, wetlands 1481.
 oil installations, hydrocarbons biodegradation, sewage microflora 2374.
 ozone disinfection 6672.
 ponds, chlorine disinfection, fecal coliforms 6671.
- Waste water, (continued)**
 populations, bacteria separation, methodology density gradients 3269.
 potatoes food processing, use, fermentation, *Saccharomycopsis fibuliger*, *Candida utilis*, biomass 157.
 pulp mills, industrial effluents, lignin, fungi, coastal waters 1455.
 rivers, microorganisms, biodegradation, dissolved oxygen, organic matter, biochemical oxygen demand, biomass, ATP 1454.
 sprays irrigation, bacteria dispersion 9250.
 survival, viruses, rotavirus, reovirus, public health 1459.
 toxicants, wastewater treatment, use, bacteria, methodology 6399.
 viruses detection, identification, New Zealand 3219.
 viruses levels standardization, disease transmission, reviews 2334.
 viruses microbial pollution, environmental monitoring, measuring techniques, reviews 2387.
 water isolates, *Salmonella*, R factors transfer, antibiotic resistance 9046.
 water quality, pollution effects, indicator species, fecal coliforms 4132.
 xenobiotics biodegradation, *Pseudomonas* 4426.
- Wastes**,
 Citrus, use, *Penicillium digitatum* ethylene production, fermentation 973.
 food processing, astaxanthin extraction, sludge, *Procambarus clarkii* 2714.
 food processing, bioreactors, methanogenesis, *Coffea arabica* 7515.
 food processing, methanogenesis, digestion (anaerobic), *Beta vulgaris* 6691.
 methanogenesis, digestion (anaerobic) 5831.
 microorganisms, biochemical oxygen demand, chemical oxygen demand, measuring techniques, enumeration, waste water, biochemical characteristics, reviews 4918.
 organic matter, conversion, biomass, bacteria, fungi, methodology, books 6793.
 organic matter, conversion, microorganisms, biomass, production, use, rural populations, rural environments, books 6794.
 pentachlorophenol containing, synthetic, activated sludge waste treatment, use, *Arthrobacter* 559.
- Wastewater treatment**,
 activated sludge, aerobic bacteria, ATP, monitoring, characterization 8409.
 activated sludge, aliphatic alcohols effects on oxygen consumption 6675.
 activated sludge biomass, ATP measurements 6696.
 activated sludge, carbon (activated), industrial effluents, dyes 6677.
 activated sludge, copper effects on 4113.
 activated sludge, dairy industry 4115.
 activated sludge, kinetics, design, microorganisms 4925.
 activated sludge, leachates, industrial wastes, landfills 4084.
 activated sludge, microorganisms, population dynamics 4105.
 activated sludge, models 2348.
 activated sludge, oxygen uptake assays use processes control 3193.
 activated sludge, paints, tin, biodes inhibition 6673.
 activated sludge, pesticides removal 4086.
 activated sludge, phenol inhibition models 552.
 activated sludge, reviews, bibliographies 4905.
 aeration, industrial effluents, phenols, coal 4902.
 aerobic conditions, animal wastes, pigs 2377.
 aerobic conditions, nitrogen sources, nutrient deficiency, models 1479.
 aerobic conditions, odors, animal wastes, pigs 2378.
 aerosols, microbial pollution, pollution research 3187.
 airborne microorganisms, pathogens 3186.
 alkaline industrial wastes, food processing, Zea mays 8402.
 alkyl sulfonates biodegradation, *Pseudomonas rathionis* 6952.
 alkylsulfate use activity, *Pseudomonas* 6030.
 anaerobic conditions, methanogenesis, bioreactors, films, thermophilic bacteria 4926.
 animal wastes effluents, bacteria 7512.
 aquaculture association, *Hypophthalmichthys molitrix*, *Aristichthys nobilis*, levels, fecal coliforms, *Streptococcus*, *Salmonella*, viruses 1463.
 aromatic compounds biodegradation, carbon (activated) adsorption 1475.
 aromatic compounds, ozonation, biodegradability 2371.
 bacteria, role, biodegradation, pentachlorophenol 1035.
 bioreactors effluents, digestion (anaerobic), methanogenesis 5827.
 biotechnology 2362.
 coal 5843.
 coal, bioreactors, digestion (anaerobic) 4109.
 conferences 2545.
 denitrification, bioreactors, denitrifying bacteria 4107.
 denitrification, land disposal, industrial effluents, munitions 2338.
 denitrification, reviews, bibliographies 4908.
 dairy industry, reviews, bibliographies 4914.
 digestion (aerobic), lagoons, landfills leachates 7516.
 digestion (anaerobic) 6681.
 digestion (anaerobic) 6685.
 digestion (anaerobic) 7520.
 digestion (anaerobic), animal wastes, cattle, mesophilic bacteria 7519.
 digestion (anaerobic), animal wastes, pigs 7521.
 digestion (anaerobic), biodegradation, toxicity, pulp mills, industrial effluents, methanogenic bacteria 6669.
 digestion (anaerobic), bioreactors 4110.
 digestion (anaerobic), bioreactors 4921.
 digestion (anaerobic), bioreactors, mathematical models 558.
 digestion (anaerobic), Citrus, characterization 4117.
 digestion (anaerobic), mathematical models 9235.
 digestion (anaerobic), mathematical models, monitoring, computer applications 6705.
 digestion (anaerobic), methane production, methanogenic bacteria 4116.
 digestion (anaerobic), methanogenesis 5825.
 digestion (anaerobic), methanogenesis, activated sludge, kinetics, mathematical models 4900.
 digestion (anaerobic), methanogenesis, industrial effluents, food industry 8405.
 digestion (anaerobic), methanogenesis, inhibition, phenol, aromatic compounds 4680.
 digestion (anaerobic), *Methanoscintia barkeri* 4123.
 digestion (anaerobic), reviews, bibliographies 4907.
 digestion (anaerobic), role *Eichhornia crassipes* 4106.
 digestion (anaerobic), sulfate removal 4899.
 2,4-dinitrotoluene conversion, activated sludge 7493.
 disinfectants, bacteria, viruses, chlorine, residues 4938.
 disinfection, pathogens 550.
 disinfection, reviews, bibliographies 4909.
 dissolved oxygen, activated sludge, abattoirs effluents 6668.
 effluents, counting methods, fecal coliforms, fecal (enrichment), chlorination 1470.
 enterovirus reduction 6676.

Wastewater treatment, (continued)

films, substrates kinetics, mathematical models, microorganisms 1461.
 filters, anaerobic conditions, removal kinetics, fecal coliforms, pages 1474.
 filters, carbon (activated), microorganisms, organic matter decomposition 2349.
 gases odors, deodorization, industries 9248.
 hydrocarbons oxidation, role, plasmids, *Acinetobacter lwoffii* 7309.
 indicator species 2342.
 indicator species, water pollution, conferences 2550.
 industrial effluents, anaerobic conditions, methanogenesis, acid production 9227.
 industrial effluents, breweries, activated sludge 4091.
 industrial effluents, breweries, chemical oxygen demand 3201.
 industrial effluents, dairy industry, rotating discs, microorganisms 6697.
 industrial effluents, food industry, potatoes, fermentation 2350.
 industrial effluents, food processing, corn, methanogenesis, bioreactors 7510.
 industrial effluents, meat industry, bioreactors, anaerobic conditions, pH, temperature, chemical oxygen demand effects on 3196.
 industrial effluents, nitrification, denitrification 2373.
 industrial effluents, nitrification, denitrification 8406.
 industrial effluents, organic compounds, biodegradation, microorganisms 4090.
 industrial effluents, petroleum, reviews, oil and gas industry 8403.
 industrial effluents, plastics, fluorine compounds 4898.
 industrial effluents, rotating discs, fungi 2341.
 industrial wastes, breweries, reviews, bibliographies 4913.
 industrial wastes, reviews, bibliographies 4917.
 inoculation, cryopreservation, *Nitrobacter* 7800.
 isolates, antibiotics production, bacteria 9234.
 kinetics, activated sludge, abattoirs effluents 6667.
 lagoons 555.
 lagoons, bacteria survival, mathematical models 1472.
 lagoons, industrial effluents, pulp mills, paper mills, mutagenicity removal 4903.
 lagoons, reviews, bibliographies 4906.
 lagoons, survival, coliforms, antibiotic resistance 1482.
 land disposal, public health, reviews, bibliographies 4911.
 land disposal, sewage, association, pollution 8400.
 leachates, industrial wastes, land disposal 4920.
 mathematical models 9228.
 meat industry, reviews, bibliographies 4912.
 methane, production, *Clostridium butyricum*, immobilized cells 1468.
 microbial pollution, disinfection, ozone, enterovirus 2372.
 microorganisms, acute toxicity, chromium, industrial wastes 9229.
 microorganisms, kinetics, diffusion, models 2346.
 microorganisms metabolism phosphorus 31, N.M.R. 4092.
 microorganisms, pentachlorophenol, industrial effluents 556.
 microorganisms role, books 2540.
 microorganisms, role, removal, nitrogen, phosphorus 3190.
 nitrification, films, bioreactors 4118.
 nitrification, modeling, aeration, supports, reactors 6670.
 nitrification, *Nitrobacter*, hydrolysis, urea, effects on 6678.
 nitrifying bacteria, inhibition, heavy metals, organic compounds 2353.
 nitrogen removal, rotating discs, fertilizers, industrial effluents, *Stichococcus bacillans*+denitrifying bacteria 9236.
 nutrient loading, conferences 2549.
 oil and gas industry, enzymes, microorganisms 180.
 oil and gas industry, hydrocarbons, industrial effluents, biodegradation, *Pseudomonas aeruginosa*, Egypt 2190.
 oil and gas industry, reviews, bibliographies 4916.
 oil and gas industry, use, tar+sand combustion, organic compounds, microorganisms oxidation 3194.
 ozonation, oxalic acid, acetic acid, nutrient requirements, *Spirillum* 4121.
 paints industrial effluents, biodegradation 2380.
 paper mills, pulp mills, use, biotechnology, reviews 8397.
 parks, USA, Florida 5845.
 peat filtration, identification, fungi 7494.
 phenols extraction, monophenol monooxygenase, *Agaricus bisporus* 5846.
 phenols removal, oxidative metabolism, activated sludge 5847.
 pigs animal wastes, anaerobic conditions, methanogenesis 9037.
 pollutants biodegradation, ozonation 1469.
 pollutants biodegradation, ozonation 1480.
 reactors, nitrification, ammonification 2354.
 reverse osmosis membranes, fouling, *Mycobacterium* cell adhesion kinetics 2383.
 rotating discs 2244.
 rotating discs, bibliographies, reviews 4904.
 rotating discs, denitrification, films pH 2356.
 rotating discs, nitrification, mathematical models 2355.
 rotating discs, oxygen transfer 2347.
 rotating discs, oxygen transfer, temperature effects on 1471.
 sediments, bacteria biodegradation monohalogenated biphenyls water pollution 3682.
 silage fermentation effluents 6683.
 sludges, isolation, *Salmonella*, indicator species, characterization, USA, Florida 4927.
 slimes, nitrate-reducing bacteria, survival, *Escherichia coli*, *Salmonella enteritidis* 6700.
 textile industry, industrial wastes, reviews, bibliographies 4915.
 1,3,5-triazine biodegradation, *Pseudomonas* 2698.
 trickling filters 4901.
 trickling filters, activated sludge, industrial effluents, food industry 4111.
 treated water, nuclear power plants, hydrogenase, immobilized cells, *Alcaligenes eutrophus* 554.
 U.V. radiation, disinfection 2337.
 waste water, toxicants, use, bacteria, methodology 8399.
 whey, dairy industry, immobilized enzymes, β -D-galactosidase 5830.

Winnar,
 air conditioning, bacteria films, industries 5849.
 baths, measuring techniques, heat production, adiabatic fermentation 5271.
 Campylobacter, thermophilic bacteria, media (enrichment) isolation 6754.
 +cetyltrimethyl ammonium bromide activity, disc-diffusion test 4046.
 concentration, phages, membrane filtration, chromatography, measuring techniques, methodology 5850.
 contamination, pasteurization, solar radiation, heat treatments, water purification, methodology 3225.
Escherichia coli detection, enterotoxins genes probes, DNA hybridization analysis 1087.
 fecal coliforms, recreation sites, membrane filtration, detection 8418.
 hot, disease control, papaya post-harvest decay, fungi 5469.

Water, (continued)

immobilized cells, effects on ethanol production, *Saccharomyces cerevisiae* 3659.
 indicator species, *Bacteroides fragilis*, membrane filtration, media (isolation) 4936.
 indicator species, *Salmonella typhi*, media (enrichment), membrane filtration 4935.
 irrigation, *Escherichia coli*, pathogens reduction, solar radiation 9249.
 isolates, nitrogen-fixing bacteria, Egypt, Arab Rep. 4647.
 isolation, *Salmonella typhi*, identification, methodology 3332.
 pasteurization, solar radiation, heat treatments, water purification, contamination, methodology 3225.
 pH, detection, fungal flora, *Glycine max* seeds 289.
 phages detection, *Escherichia coli*, plaque assay, methodology 2403.
 phages enumeration methodology, bacteria hosts adsorption 2408.
 recovery, fecal coliforms, media (culture), agar 8415.
 rivers, exposure, titanium surfaces, microorganisms colonization 3650.
 sewage contamination, *Salmonella* isolation, media (enrichment) methodology 9259.
 sorption, *Lactarius trivialis*, assays 1905.
Streptococcus bovis indicator species, media (isolation), membrane filtration, sodium azide 5054.
 U.V. radiation disinfection, *Escherichia coli*, *Candida parapsilosis*, phase f2, kinetics models 568.
 viruses concentration, filtration methodology 9283.
 viruses isolation, adsorption, phages 6750.

Water activity,
 association, *Aspergillus restrictus*, enzymes, production, detection, seeds, contamination 1166.
 effects on mycotoxins biosynthesis, *Alternaria alternata*, wheat 5371.
 effects on spoilage, yeasts, confectionery 6698.
Staphylococcus aureus growth, cheese 6960.
Staphylococcus aureus growth, enterotoxin A formation, canned food, bacon 6979.

Water analysis,
 biochemical oxygen demand, pollution monitoring, methodology 6680.
 microbial pollution, indicator species, reviews, bibliographies 4945.
 microbial pollution, potentiometry, lipoic acid, reduction, fecal coliforms, indicator species 2392.

Water availability,
 effects on *Pseudomonas solanacearum* wilt pathogenesis, *Arachis hypogaea* 249.
 role, *Malus pumila* fruits susceptibility, *Venturia inaequalis* scab 2797.
 vesicular-arbuscular mycorrhizae colonization, *Allium cepa* growth 3947.

Water chemistry,
 estuaries, oil pollution, population levels, hydrocarbon-degrading bacteria 6399.
 gramicidin S, acidity, solubility 6777.

Water conductivity,
 blue stain, *Ceratocystis nigra*carpa, Basidiomycetes infection effects on, *Pinus ponderosa* 8194.
 transpiration, vesicular-arbuscular mycorrhizae, *Citrus* 8216.

Water content,
Agaricus bisporus, cultivation techniques, harvesting, effects on 8701.
 effects on acid production, fermentation, silage, *Medicago* 2745.
 effects on *Eurotium amstelodami*, *Saccharomyces rouxii*, spoilage, mathematical models, assays 8877.
 effects on molds food contamination corn, toxins production 2749.
 effects on, *Nitrosomonas europaea*, nitrous oxide, production, soil 7274.
Eucalyptus marginata bark, relationship *Phytophthora cinnamomi* infection 358.

Water pollution,
Escherichia coli isolation, Brazil 4950.
 fecal coliforms, rivers, Brazil 7535.
 indicator species, aquatic microorganisms, reviews, bibliographies 4944.
 indicator species, *Bifidobacterium adolescentis*, *Bifidobacterium breve*, isolation, feces 582.
 microbial pollution, bacteria, biodegradation, estuaries 6713.
 monohalogenated biphenyls, bacteria biodegradation, sediments, aquatic environment, wastewater treatment 3682.
 pathogens, water analysis, reviews, bibliographies 4946.
 phages, coliforms, indicator species, water quality, sewage treatment 4943.
 phenols, biodegradation, pollution effects, water pollution 5812.
Salmonella, media (isolation) 5857.
Salmonella, microbial pollution, media (enrichment) 4176.
 sewage, aeration, water treatment, sewage 8410.
 sewage treatment, phages, coliforms, indicator species, water quality 4943.
 viruses, rivers, Japan 8423.
 wastewater treatment, indicator species, conferences 2550.

Water potential,
 association, biodegradation, forest products, fungi 1242.
 effects on sclerotia germination, *Sclerotium roffii* 6338.
Prunus persica, xylem, phony disease, bacteria 8879.
 soil, effects on growth, *Gaeumannomyces graminis var. tritici* 8986.
 soil, respiration, nitrogen fixation, *Acetobacter vinelandii* 8237.
 +soil temperature, disease control, *Gossypium hirsutum*, root rot, *Phymatotrichum omnivorum* 8009.
 soils (loam), soil microorganisms respiration association 2149.

Water purification,
 solar radiation, heat treatments, contamination, pasteurization, water, methodology 3225.

Water quality,
 bacteria indicator species, abundance, *Bivalvia* 8424.
 desalination plants, microbiology, physicochemical properties, bacteria 4942.
 effects on, enterovirus, concentration, surface water 5853.
 indicator species, phages, coliforms, water pollution, sewage treatment 4943.
 odors, actinomycetes, conferences 3387.
 pollution effects, waste water, canals, indicator species, fecal coliforms 4132.
 pollution monitoring methodology, indicator species, *Salmonella* 5856.
 rivers, pollution monitoring, indicator species, *Clostridium perfringens* 5855.
 saprophytes, bacteria, enumeration, methodology 6755.

Water reclamation,
 pollution control, indicator species, viruses, *Mycobacterium*, *Pseudomonas aeruginosa*, *Candida albicans* 2394.
 recycling, wastewater treatment, water-borne diseases 3224.
 ultrafiltration, isolation, phages, poliovirus, rotavirus, reovirus 2396.

Water relations,
Agropyron smithii, *Glomus symbiosii* effects on 6342.
 roots, *Eucalyptus*, *Phytophthora cinnamomi* infection 5605.

Water resources,
 coliforms indicator species incidences, Iraq 2407.

- Water salinity**,
irrigation effects on vesicular-arbuscular mycorrhizas vertical distribution, Cistus 1255.
- Water stratification**,
samplers, bacterioplankton, marine environment 1611.
- Water stress**,
Botryosphaeria dothidea, hyphae, morphology 4614.
effects on *Cyamopsis tetragonoloba* nitrogen fixation, nitrogenase activity, nodulation 4670.
pathogenicity, *Ceratocystis penicillata*, *Ceratocystis polonica*, blue stain, *Picea abies* 8173.
- Water supplies**,
contamination, *Legionella pneumophila* isolation methodology, media (culture), guinea-pigs injection 4211.
environmental studies, epidemiology, *Legionnaire's* disease, hospitals, man 9251.
hospitals, disease transmission, *Legionella pneumophila*, *Legionnaire's* disease, *Legionella micdadei*, Pittsburgh pneumonia agent 5854.
hospitals, isolation, *Legionella pneumophila* 4931.
hospitals, *Legionnaire's* disease, epidemiology, British Isles, man 3215.
Legionella pneumophila, disease transmission, epidemiology 3214.
Legionella pneumophila isolation, hospitals 1498.
Legionella pneumophila, legionellosis, epidemiology, Sweden 3216.
Legionella pneumophila, *Legionnaire's* disease, epidemiology, plasmids 4949.
sanitation, association, disease control, diarrhea, *Shigella*, man 7529.
water-borne diseases, *Legionnaire's* disease, Italy 4940.
- contamination, *Legionella pneumophila*, role, epidemiology, nosocomial infection, *Legionnaire's* disease, USA, Pennsylvania 7528.
- Water temperature**,
immersion, effects on roots, ectomycorrhizas colonization, disease control, *Phytophthora cinnamomi*, seedlings, *Pinus radiata* 7219.
indicator species, bacteria, rivers, estuaries 4131.
relationship, coliforms indicator species, identification, incidence, lakes 557.
- Water treatment**,
biodegradation+carbon (activated) adsorption 7498.
biodegradation, carbon (activated) adsorption, aromatic compounds removal 7502.
carbon (activated) adsorption, interaction biodegradation, microorganisms 7646.
carbon (activated), adsorption, regeneration, bacteria 7496.
chlorination, reduction, trihalomethanes, association, viruses, bacteria, levels 3206.
enterovirus, removal, surface water, Netherlands 4953.
fluoridation, dental caries prophylaxis, children 7552.
ground water, carbon (activated) adsorption, +biodegradation 7499.
phenol removal, carbon (activated) adsorption, biodegradation, Arthropacter 7500.
sewage biodegradation, water pollution, aeration, streams 8410.
trihalomethanes removal, biodegradation, carbon (activated) adsorption 7501.
trihalomethanes removal, ozone+carbon (activated)+biodegradation, microorganisms 7497.
- Water use**,
recycling, wastewater treatment, water-borne diseases 3224.
- Water-borne diseases**,
Campylobacter fetus subsp. jejuni recovery, filters, analysis 563.
drinking water, reviews, bibliographies 4947.
Legionella, epidemiology, buildings 4933.
relativus (simian) SA11 survival, drinking water 7538.
water supplies, *Legionnaire's* disease, Italy 4940.
water use, recycling, water reclamation, wastewater treatment 3224.
- Watermark disease**,
Erwinia salicis, disease transmission, propagules, *Salix alba* 363.
- Watermelon mosaic virus**,
disease transmission, foliar application, oils, *Cucurbita pepo*, *Myzus persicae* 6277.
effects on chemical composition, fruits, *Cucurbita maxima* 6257.
effects on *Meloidogyne javanica* infection, *Cucurbita pepo* 6266.
incidence, *Cucumis sativus*, mulches, effects on 4585.
plant diseases, *Cucumis sativus*, *Lagenaria siceraria*, host range, disease transmission, Morocco 6270.
- Watermelon mosaic virus 1**,
comparison, papaya ringspot virus, host range, *Cucumis* 8039.
- Watermelon mosaic virus 2**,
Bemisia tabaci, disease transmission, epidemiology, *Cucumis melo*, *Cucurbita pepo*, USA, California 3821.
- Waxes**,
Legionella pneumophila demonstration, hexamine silver use 3289.
production, *Candida tropicalis* 5239.
- Weather**,
epidemiology, *Colletotrichum graminicola* anthracnose, *Poa annua* var. reptans 5429.
projections, crops, plant diseases 1098.
- Weathering**,
microorganisms, biogeochemistry, reviews 8210.
- Web blight**,
Rhizoctonia microclerotia, *Phaseolus vulgaris* genotypes, disease resistance 8060.
- Weed control**,
biological control, *Colletotrichum gloeosporioides* spores production, fermenters, *Aeschynomene virginica* 3895.
biological control, conferences, books 4249.
biological control, cost-benefit analysis 3888.
biological control, ecosystem management, epidemiology, pathogens 3894.
biological control, host-pathogen interactions, *Acremonium zonatum* penetration, leaves, *Eichhornia crassipes* 8827.
biological control, pathogens 3889.
biological control, relationship epidemics, plant diseases 3890.
biological control, relationship genetic variance, weeds 3892.
biological control, relationship host-pathogen interactions 3891.
biological control, relationship, virulence, genetic variance, phytopathogenic fungi 3893.
biological control, research programs, commercial species, microorganisms 3896.
biological control, safety regulations, pathogens 3897.
biological control, use *Phytophthora palmivora*, pathogenicity, *Morrenia odorata* 2809.
Carduus nutans, susceptibility, *Puccinia carduorum* biological control 6073.
Chondrilla juncea, *Puccinia chondrillina* biological control, life cycle, USA, Washington 6074.
Chondrilla juncea, *Puccinia chondrillina* biological control 6075.
integrated control, pathogens 3898.
- Weeds**,
biological control, cost-benefit analysis 3888.
biological control, fungi, efficacy surveys 8650.
disease reservoirs, *Fusarium oxysporum*, blight, *Glycine max* 8770.
genetic variance, relationship biological control, weed control 3892.
hosts, tobacco ringspot virus, tomato ringspot virus 3818.
Macrophomina phaseolina latent infection, sclerotia soil levels, USA, Arizona 8044.
vesicular-arbuscular mycorrhizas symbiosis, association, habitat disturbance, USA, Utah 396.
- Wells**,
Pseudomonas aureofaciens contamination, hydrocarbons, metabolism 1497.
- Weed indices**,
Staphylococcus aureus, clinical isolates, antibiotic resistance 5707.
- West Nile virus**,
antigens, detection, agglutination, protein A 4991.
seroepidemiology, hemolysis, detection antibodies, man 4996.
- Western X disease**,
mycoplasma-like organisms, disease spread, *Prunus virginiana*, *Prunus americana* 2802.
- Wetlands**,
Oryza sativa soil, nitrogen cycle 3965.
waste water, nutrients removal, nitrogen, phosphorus 1481.
- Wetwood**,
bacteria, association *Scolytus ventralis* attack, Abies 5585.
population levels, *Enterobacter*, *Clotridium*, *Populus americanica* 8953.
- Wheat**,
fermentation, *Aspergillus niger*, amylo-1,6-glucosidase, recovery 204.
flour, food processing, effects on vomitoxin levels 7890.
food contamination, mycotoxins 7098.
fungi mycelia penetration 1080.
Fusarium zearealense incident 1079.
incidence, vomitoxin, zearealene, aflatoxin B1, T-2 toxin 1927.
mycotoxins biosynthesis, *Alternaria alternata*, water activity, temperature effects on 5371.
- Wheat mosaic virus**,
disease resistance plant breeding screening projects, seedlings, *Triticum aestivum* 4571.
- Wheat streak mosaic virus**,
infection, *Agropyron*, disease resistance, genetic control 8069.
infection, etiology, incidence, *Triticum cultivars*, USA, Colorado 7980.
streak, disease control, role, resistance association *Eriophyes tulipae*, *Triticum aestivum* 8075.
- Wheat**,
carbon sources, citric acid production, *Candida lipolytica* 873.
cheese, digestion (anaerobic), reactors, methane production 3197.
conversion, production, acetone, butanol, *Clotridium acetobutylicum* 4381.
+corn fermentation, production, ethanol, proteins feeds 982.
dairy industry, wastewater treatment, immobilized enzymes, β -D-galactosidase 5830.
dairy starters, characterization, *Kluyveromyces fragilis* 3717.
fermentation, cyanocobalamin, production, *Propionibacterium*, *Propionibacterium shermanii* 145.
fermentation, ethanol, *Kluyveromyces fragilis*, immobilized cells 2684.
fermentator, ethanol production, continuous culture, *Kluyveromyces fragilis* 3504.
fermentation, gibberellic acid biosynthesis, *Fusarium moniliforme*, mathematical models 5970.
fermentation, production, butanol, acetone, *Clotridium acetobutylicum* 3546.
fermentation, single-cell protein, amino acid composition, yeasts 1722.
fermentation, single-cell protein production 1718.
fermentation, single-cell protein production, *Kluyveromyces fragilis* 1723.
fermentation, single-cell protein production, nutritive value, conferences 2544.
fermentation, single-cell protein production, yeasts 1717.
fermentation, single-cell protein production, yeasts 3420.
fermentation, single-cell protein, yeasts 1720.
fermentation, 2,3-butyldiene glycol production, *Klebsiella pneumoniae*, *Enterobacter aerogenes* 2643.
+*Lactobacillus plantarum* inoculation, silage, crop residues, *Gossypium hirsutum* 2743.
lactose, fermentation, continuous culture, catabolic repression resistance mutants, *Saccharomyces cerevisiae* 8668.
lactose, fermentation, ethanol production, immobilized cells, *Kluyveromyces marxianus*, *Saccharomyces cerevisiae* 1864.
lactose hydrolysis, β -D-galactosidase, immobilized enzymes, *Aspergillus oryzae* 206.
- nutrient sources, lipids production, *Aspergillus nidulans*, *Penicillium frequentans*, *Fusarium lycopersicum* 7788.
permeate, fermentation, *Kluyveromyces marxianus*, ethanol production 8669.
recycling methodology, pathogens propagation, biological control, *Insecta*, *Bacillus thuringiensis*, δ -toxin 6899.
stimulation proteinase, extracellular enzymes, *Pseudomonas aeruginosa* 1810.
substrates, *Kluyveromyces fragilis*, biomass, association, ethanol production, aerobic conditions 1069.
+sucrose liquid culture, *Leuconostoc mesenteroides* use production 8474.
- Whisky**,
ethanol, fermentation, models 176.
- White clover mosaic virus**,
enzyme-linked immunosorbent assay detection 7927.
infection, *Trifolium*, host range, field trials 1113.
infection, *Trifolium pratense*, nitrogen fixation, *Rhizobium symbiosis* 7141.
- White mold**,
Sclerotinia sclerotiorum, canopies effects on disease control, *Phaseolus vulgaris* 7930.
- White rot**,
Abies alba, spatial distribution, annual rhythms, *Collybia butyracea*, *Collybia maculata* 4616.
Allium, iprodione resistance, *Sclerotium cepivorum* 6312.
Allium, pesticide resistance, *Sclerotium cepivorum*, iprodione, vinclozolin, myclozolin, dicloran, quintozene 5529.
decay fungi, vanillic acid, syringic acid, metabolism, association, lignin, biodegradation 2705.
Fomes annosus, lignocelluloses biodegradation 5309.
fungi, biodegradation, *Triticum aestivum* lignocelluloses 6943.
fungi, detritus effects on pathogenesis, *Cynodon dactylon*, *Eremochloa ophiuroides*, *Poa pratensis*, *Stenotaphrum secundatum* 9850.

White rot, (continued)

fungi, wood, manganese bioaccumulation 7240.
lignin biodegradation, lignocelluloses fermentation, optimization, straw,
Triticum aestivum 1887.
Sclerotium cepivorum, disease resistance, Allium cepa, Allium porrum, screening
projects 3866.
Sclerotium cepivorum, plants, host range 1156.

White rust,

Albugo candida disease resistance, association inheritance *Ac7* locus, Brassica
napus 2854.
Chrysanthemum, epidemiology, Puccinia horiana, Australia 2024.
Euphorbia sativus, disease control, mancozeb 2902.

Widal test,

diagnosis, typhoid fever 2479.

Wildfire,

Pseudomonas syringae tabaci, disease resistance, inheritance, plant breeding,
cattle culture, Nicotiana tabacum 317.

Wilt,

Ceratocystis fagacearum, aerial photography surveys, Quercus, USA, Texas 8189.
Ceratocystis fagacearum, pathogenesis, Quercus laevis, USA, South Carolina 2115.
Ceratocystis fagacearum, survival, wood, storage conditions, Quercus 8956.
Ceratocystis fimbriata, disease control, disease resistance rootstocks, pruning,
Brazil, Mangifera indica 5440.
Cicer arietinum, epidemiology, Verticillium albo-atrum, Pakistan 1117.
Fusarium, disease resistance, Solanum tuberosum 1146.
Fusarium, +Meloiodogyne infection, disease resistance, plant breeding,
Lycopersicon esculentum 2864.
Fusarium oxysporum, biological control, suppression, Pseudomonas putida,
survival, soil moisture, Linum usitatissimum 2897.
Fusarium oxysporum, disease resistance, plant breeding, cultivars, Citrullus
lanatus 8905.
Fusarium oxysporum f.sp.ciceris, disease resistance, gene regulation, Cicer
arietinum 3867.
Fusarium oxysporum f.sp.ciceris, disease resistance inheritance, Cicer arietinum
236.
Fusarium oxysporum f.sp.elaeidis, disease resistance, plant breeding, Elaeis
guineensis 2871.
Fusarium oxysporum f.sp.lycopersici, Lycopersicon esculentum, factors affecting
5455.
Fusarium oxysporum f.sp.niveum, disease resistance, agricultural practices,
Solanum lanatus 2845.
Fusarium oxysporum f.sp.pisi, Pisum varietes, field trials 1979.
Fusarium oxysporum f.sp.vasinfertum, disease resistance, terpenoids, roots
exudates, Gossypium hirsutum 8883.
Fusarium oxysporum f.sp.vasinfertum, interspecific relationships, Meloiodogyne
incognita, soil nutrients uptake, Gossypium barbadense 283.
Fusarium, Solanum khasianum 1161.
gram-negative bacteria, colonial characteristics, pathogenicity, Catharanthus
roseus, Vitis vinifera 280.
Humulus lupulus, pathogenicity, Verticillium albo-atrum 5459.
Medicago sativa, disease resistance, Corynebacterium insidiosum, effects on
phosphorus uptake 3879.
Pisum sativum, Fusarium oxysporum f.sp.pisi incidence 241.
Pseudomonas solanacearum, Arachis hypogaea, soil, water availability, effects on
pathogenesis 249.
Pseudomonas solanacearum, biological control, avirulent strains, bacteriocins,
production, Nicotiana tabacum 8113.
Pseudomonas solanacearum, disease resistance, cross-resistance, Meloiodogyne,
Solanum sparsipilum 8097.
Pseudomonas solanacearum, disease resistance, germplasm, Solanum sucrose,
Solanum tuberosum 8090.
Pseudomonas solanacearum, disease resistance, plant breeding, Capsicum annuum,
Capsicum frutescens 8094.
Pseudomonas solanacearum, host range, crops 7177.
Quercus, Ceratocystis fagacearum, epidemiology, USA, West Virginia 1236.
Sclerotinia sclerotiorum, planting timing effects on, Cicer arietinum 5412.
Sclerotium rolfii, Eucalyptus, incidence, greenhouses 8942.
Verticillium albo-atrum, Corynebacterium michiganense pv.insidiosum,
hydroxyproline content, cell walls, association, Medicago sativa 7928.
Verticillium albo-atrum, vesicular-arbuscular mycorrhizas inoculation effects on,
Lycopersicon esculentum 1205.
Verticillium dahliae, Gossypium barbadense, phytoalexins accumulation association
2824.
Verticillium dahliae, Lycopersicon esculentum, disease resistance, plant breeding
2068.
Verticillium dahliae, Lycopersicon esculentum, epidemiology, USA, North Carolina
5456.
Verticillium dahliae, Lycopersicon esculentum predisposing factors, potassium,
phosphorus 3833.
Verticillium dahliae, synergism, Erwinia carotovora subsp.atroseptica, Erwinia
carotovora subsp.carotovora, blackleg, Solanum tuberosum 7191.
Verticillium, disease resistance, plant breeding, cultivars, Lycopersicon
esculentum 1178.
Verticillium, Gossypium hirsutum, cellulose conversion, glucose production,
cellulase 3683.
Verticillium, Rhizobium meliloti growth, Medicago sativa, fungicides effects on
1211.
Xanthomonas campestris pv.graminis, Gramineae, incidence, British Isles 4521.

Wiltng,
effects on, lactic acid bacteria acid production, silage fermentation, Zea mays
7873.

WIN 49375,
antibacterial activity 9091.

Wind,
dispersal, phytopathogenic fungi spores, modelling, crop fields, Hordeum vulgare
5403.
Pseudocercospora heliophthoides, spores dispersal, eyespot, straw, Triticum
aestivum 1997.

Wine,
aroma, role, Botrytis cinerea esterase activity 4410.
association yeasts growth, ammonium phosphate, vitamins, effects on 7869.
2,3-butanediols levels, malolactic fermentation, Leuconostoc oenos 2693.
corks contamination, off flavor, Streptomyces, Aspergillus, Penicillium 1870.
fermentation, ethanol, yeasts, lactic acid bacteria 5279.
fermentation, grapes post-harvest decay effects on, fungi 6939.
fermentation, role, Lactobacillus delbrueckii, malic acid, genes, cloning,

Wine, (continued)

Escherichia coli, Saccharomyces cerevisiae 2681.
fermentation, Saccharomyces cerevisiae, nontarget organisms, toxicity,
herbicides, insecticides, fungicides 2082.
fermentation, Saccharomyces ellipsoideus, relationship, Vitis vinifera content,
carbon, hydrogen, nitrogen 7793.
fermentation, storage, acetic acid bacteria succession 6134.
malolactic fermentation, immobilized cells, Leuconostoc oenos 165.
malolactic fermentation, Leuconostoc oenos, viability 6125.
malolactic fermentation, malic acid, tartaric acid, levels, monitoring 8665.
musts fermentation, temperature effects on, organoleptic properties 1871.
organic compounds, acids, effects on fermentation, microorganisms 8672.
organoleptic evaluation, musts, decomposition, L-tartaric acid, L-malic acid,
Botrytis cinerea 8666.
organoleptic evaluation, musts, malolactic fermentation, Leuconostoc oenos 2692.
organoleptic properties, fermentation control effects on 6120.
pseudocytolytic enzymes, microorganisms 164.
Phoenix dactylifera, fermentation, yeasts, lactic acid bacteria, acetic acid
bacteria 5288.
production, fatty acids by-products, inhibition, fermentation, yeasts 5286.
production, lactic acid bacteria malolactic fermentation, reviews 173.
production, musts, fermentation, aroma compounds, organoleptic evaluation,
Schizosaccharomyces octodecivorus 6933.
quality, association, Vitis powdery mildew, Uncinula necator, USA, New York 8833.
starter cultures, malolactic fermentation, drying, storage, viability,
Leuconostoc oenos 7816.
taints production, corks, contamination, growth, Fungi 7798.

Wissacaula periplocafolia,
little leaf etiology, rickettsia-like organisms, mycoplasma-like organisms,
Jamaica, new records 2046.
little leaf, rickettsia-like organisms, mycoplasma-like organisms, disease
transmission, treatment, Jamaica 2047.

Wolinella succinogenes,
menaquinone, thermoplasmaquinone, spectrometry, N.M.R. 6894.

Wood,
biodegradation, Dacrymycetales 1891.
biodegradation, energy resources, batch culture, microorganisms, digestion
(anaerobic) 3655.
biodegradation, microorganisms, reviews 4436.
biodegradation, Coniophora puteana, Aspergillus tamarii, fungicides,
phytoaxis 1252.
biodegradation, role, actinomycetes 1246.
carbohydrates, pulp mills, fermentation, solvents production, Clostridium 5259.
carvings, fungi, biodegradation, anthropology 1023.
Cassia garretiana, extracts, 3,3',4',5'-tetrahydroxystilbene, antifungal
activity, structure-activity relationships, Penicillium citrinum, Rhizopus
nicotianae 7381.
decay, brown rot, Coniophora cerebella, Poria vaporaria, Gloeophyllum abietinum,
Pinus 8947.
decay fungi, Basidiomycetes, storage, Salix nigra, Populus deltoides 8197.
decay, fungi chitin biosynthesis, polyoxin effects on 3647.
decay fungi, methodology, preservatives tolerance 2108.
decay fungi, polar environments 3920.
decay, nutrition, Klebsiella pneumoniae 4423.
decay, relationship cellulolytic microorganisms ecological distribution, coastal
waters 8196.
decomposition, bacteria, Pinus silvestris, Fagus sylvatica 7239.
decomposition, soil microorganisms, urea fertilization effects on, forests 5578.
decay fungi, Serpula lacynans, biodegradation, Switzerland 1247.
forests, litter, biodegradation, microorganisms 5537.
fungi biodegradation, metals bioaccumulation 1030.
fungi hyphae, staining methodology 7631.
hydrolysates, acids pretreatment, fermentation, 2,3-butanediol, butanol,
production, Clostridium acetobutylicum, Klebsiella pneumoniae 5220.
hydrolysates, hydrogen fluoride pretreatment, ethanol production, fermentation,
Zymomonas mobilis, Clostridium saccharolyticum 5270.
hydrolysis, cellulolytic enzymes, mathematical models, Populus 8539.
hydrolysis, enzymes, acids, sugars fermentation, ethanol production 7814.
inoculation, fruit bodies production, Basidiomycetes 7846.
lignin, Stereum frustulosum, enzymes, biodegradation 1022.
litter fall, decomposition, forests, Fagus sylvatica, Quercus petraea, British
Isles 352.
manganese bioaccumulation, fungi white rot 7240.
Massarina aquatica infection, antagonism, fungi 2110.
microorganisms biodegradation, books 1683.
nitrogen, effects on, fungi, biodegradation, soil 1244.
Pinus caraea var.hondrensis, blue stain, disease control 6331.
Pinus densiflora, antifungal agents, disease resistance, Fomes annosus 354.
Pinus radiata, hydrolysis, Saccharomyces cerevisiae, fermentation, inhibitors
7807.
Populus tremuloides, hydrogen fluoride hydrolysis, sugars utilization,
2,3-butanediol production, Klebsiella pneumoniae 8632.
preservatives 1291.
preservatives, copper-chrome-arsenic, chemical analysis, iodometry 7244.
preservatives, diffusion, toxicity, fungi 1251.
preservatives, pentachlorophenol, industrial effluents, wastewater treatment 556.
preservatives, pentachlorophenol, inhibition decay fungi, buildings 7242.
processing, molds air spora levels 8195.
Quercus, storage conditions, survival, wilt, Ceratocystis fagacearum 8956.
soft rot, biodegradation, Phialophora hoffmannii, cinematography 1245.

Woodchuck hepatitis virus,
radioimmunoassay, solid phase methods 597.

Wool,
biodegradation, control, biocides, fungi 1288.
industrial wastes, agricultural wastes, temperature, aeration, composting 4100.
microorganisms biodegradation, books 1683.
preservatives 1291.
Pseudomonas isolation, proteinase, electrophoretic mobility, sheep 1753.
textile industry, industrial wastes, composting 5837.

Wort,
addition, beer fermentation, flavor, yeasts 2691.
fermentation, acetic acid esters production, Saccharomyces uvarum 4420.
fermentation, acetyl-CoA levels, acetic acid esters production, Saccharomyces
cerevisiae 4416.
fermentation, beer brewing, yeasts 984.
fermentation, ethanol production, α -D-glucosidase activity 5287.

Wort, (continued)

fermentation, phenyl carbonic acids production, temperature effects on, flavor, beer 2682.

fermentation, *Saccharomyces cerevisiae*, mezcál 1862.
high-gravity, fermentation, ethanol production, *Saccharomyces uvarum* 8667.
methionine sulfoxide inhibition, dimethyl sulfoxide reductase, *Saccharomyces cerevisiae* 6941.

Wound infection,

bacteria inhibition decay fungi, *Picea abies* 7238.
Botryosphaeria dothidea, *Botryosphaeria ribis*, disease control, benomyl + captan, pruning, *Prunus persica* 8913.
Cytospora, dieback, pruning, *Prunus persica* 8805.

Woyonovicia graminis,

infection, *Triticum durum*, Italy 7956.

X-Ray absorption spectroscopy,

structure, olivetrein D, olivetrein A, *Streptovorticillium olivetrcili* 7478.

X-Ray crystallography,

D-alanyl-carboxypeptidase-transpeptidase, β -lactam antibiotics binding, *Streptomyces* 3457.
antibiotic FR-900109, derivatives 1434.
antibiotic X-14885A, isolation, antibacterial activity, *Treponema hyodysenteriae*, gram-negative bacteria 1442.
9-O-*p*-benzoylmaleagrin, maleagrin, isolation, *Penicillium maleagrinum* 8375.
cytochrome c3 hydrogenase, secondary structure, *Desulfovibrio vulgaris* 2625.
DNA-binding protein, HeLa cells, adenovirus (human) 5 2563.
 β -lactamase, *Enterobacter cloacae* 1760.
phospholipase C active sites, *Bacillus cereus* 5986.
serine proteinase proteinase inhibitor complex, *Streptomyces griseus* 20.
sternophyllin I, *Stemphylium botryosum* 1954.
structure, β -lactam antibiotics, computer graphics 7462.
toxin B, *Staphylococcus aureus* 6214.
tyrosyl-tRNA synthetase, site-directed mutagenesis tyrosyl-tRNA synthetase genes, structure-activity relationships, *Bacillus stearothermophilus* 8573.

X-Ray diffraction,

aluminum, hyponic conformation 3140.
autocorrelation, macromolecular structure, *Streptomyces macromyceticus* 6558.
crystal structure, DNA-binding protein, *Bacillus stearothermophilus* 7663.
crystal structure, roseotoxin B, *Trichothecium roseum* 8755.
2,6-dihydroxyteroid dehydrogenases, crystallography, *Streptomyces hydrogenans* 6834.
ribosomal protein L6, crystal structure, *Bacillus stearothermophilus* 7662.
ribulosebiphosphate carboxylase, *Rhodospirillum rubrum* 6001.
tetrahydrofolate dehydrogenase inhibition, mathematical models, *Lactobacillus casei* 4323.
trichorzianine A1, *Trichoderma harzianum* 1727.

X-Ray scattering,

inorganic pyrophosphatase interaction, magnesium, manganese, phosphate ligands, yeasts 3487.

Xanthomonas cucurbitae,

xanthan gum biosynthesis 3536.

Xanthan,

structure, *Xanthomonas campestris* 1829.

Xanthan gum,

biosynthesis, *Xanthomonas cucurbitae* 3536.

Xanthine oxidase,

Aspergillus niger, association, *Caldariomyces fumago*, chloride peroxidase, use, bioelectrochemical cell, chemicals synthesis 6076.
hypoxanthine, inhibition, milk, dairy starters 7863.

Xanthobacter autotrophicus,

fermentation enzymes comparison, *Alcaligenes*, *Nocardia opaca* 150.

Xanthomonas,

cephalexin amidase preparation 6823.
plant diseases, diagnosis 3780.
variants, pathogenesis, plant diseases 3772.

Xanthomonas albilineans,

scald, *Saccharum officinale*, chloroplasts differentiation 253.

Xanthomonas campestris,

α -amylase, heat inactivation, ultrahigh temperature sterilization, dairy products 6974.
spot, disease resistance, plant breeding, *Capsicum annuum* 8903.
xanthan, structure 1829.

Xanthomonas campestris pv. campestris,

black rot, Cruciferae, epidemiology, Thailand 287.
isolation, Brassica seeds, media (selective) 4199.

Xanthomonas campestris pv. graminis,

wilt, Gramineae, incidence, British Isles 4521.

Xanthomonas campestris pv. hyacinthi,

yellow, *Scilla tubergeniana* 2042.

Xanthomonas campestris pv. malvacearum,

blight, disease control, β -lactam antibiotics, *Gossypium hirsutum* 6315.
blight, disease resistance, plant breeding, *Gossypium hirsutum* 2832.
blight, host-pathogen interactions, control, plant breeding, reviews, *Gossypium hirsutum* 3846.
blight, pathogenicity, plants 7923.

Xanthomonas campestris pv. manihotis,

blight, disease resistance, plant breeding, cultivars, *Manihot esculenta* 5497.

Xanthomonas campestris pv. oryzae,

blight disease resistance, *Oryza sativa* 6298.
growth, penetration, *Oryza sativa*, leaves, electron microscopy 6243.
hypersensitive response, *Vigna unguiculata* leaves 6230.

Xanthomonas campestris pv. phaseoli,

blight, *Phaseolus vulgaris*, symptoms, inheritance 4501.

Xanthomonas campestris pv. populi,

necrosis, bark, *Populus* 8171.

Xanthomonas campestris pv. pruni,

toxicity, detection, bioassays, association, membrane potential, *Prunus persica*, cell culture 9156.

Xanthomonas campestris pv. vesicatoria,

spot, disease resistance, plant breeding, cultivars, *Lycopersicon* 2829.
spot, *Capsicum annuum*, chlorosis, ethylene production 4546.
spot, *Capsicum chacoense*, disease resistance 4582.
spot, effects on yield, fruits, *Lycopersicon esculentum* 277.

Xanthomonas campestris pv. vignicola,

blight, disease resistance, *Vigna unguiculata* 8891.

Xanthomonas campestris var. oryzae,

leaf blight, disease resistance, mutagenesis, *Oryza sativa* 5475.

Xanthomonas campestris var. phaseoli,

leaves lesions, *Phaseolus vulgaris*, hydrogen fluoride effects on 7133.

Xanthomonas campestris var. pruni,

infection, *Prunus domestica*, scanning electron microscopy 7158.

Xanthomonas malvacearum,

blight, disease resistance, genotypes, *Gossypium arboreum* 8059.
pectinolytic enzymes, activity, cell culture 3516.

Xanthosoma sagittifolium,

root rot, etiology, pathogenesis, *Pythium myriotylum* 8844.

Xenobiotics,

binding, humus, soil microorganisms association 1258.
biodegradation, bacteria, inhibition, aquatic microorganisms 8687.
biodegradation, bacteria, reviews 1011.
biodegradation, bacteria, reviews 1012.
biodegradation, waste water 4426.
industrial wastes, biodegradation, bacteria 8393.

Xerocomus badius,

freezing effects on aroma, *Tricheloma equestre*, freezing effects on aroma 7856.

Xerophilic fungi,

spore, coconut 5344.

Xiphinema,

vectors, tomato ringspot virus, stem pitting, *Prunus persica* 8811.

Xiphinema californicum,

role, disease transmission, tomato ringspot virus, *Prunus* 4529.

Xiphinema diversicaudatum,

disease transmission, strawberry latent ringspot virus, arabis mosaic virus, plants 6272.

Xiphinema index,

vectors, grapevine fanleaf virus detection, enzyme-linked immunosorbent assay methodology 3255.

Xylan,

conversion, triglycerides, yeasts 4402.
hydrolysis, cellulolytic enzymes, *Chaetomium cellulolyticum* 1752.
hydrolysis, endo-1,3- β -D-xylanase, *Cellulomonas* 2566.
utilization, nutrition, *Klebsiella pneumoniae*, wood decay 4423.

1,4- β -D-Xylanase,

biosynthesis, cyclic AMP regulation, *Bacillus circulans* 6036.

Xylem,

Medicago sativa, *Vermicillium albo-atrum* infection pathogenesis 1118.

Prunus persica, water potential, phony disease, bacteria 8879.

Xylene,

biodegradation, plasmids, genetic analysis, reviews, hydrocarbon-degrading bacteria 8284.
preservatives, *Bacillus thuringiensis* formulations, biological control, *Choristoneura fumiferana* 2667.

Xylia torensia,

nodulation, *Rhizobium* 4667.

Xylobolus frustulatus,

biodegradation, *Quercus rubra*, *Quercus alba*, cellulose, lignin 3674.

Xylose,

association, enhancement, growth, ethanol, fermentation, *Pachysolen tannophilus*, mutants 6144.
cellobiose, glucose, mixtures, ethanol production, mixed culture, *Clostridium saccharoviticum*, *Zymomonas anaerobia* 8661.
conversion, ethanol production, *Pachysolen tannophilus*, *Candida tropicalis* 3657.
conversion, ethanol production, *Pachysolen tannophilus* 3595.
conversion, yeasts, fermentation, books 2539.
conversion, 2,3-butanediol production, *Klebsiella oxytoca* 5262.
fermentation, *Candida utilis*, anaerobic conditions, effects on ethanol production 991.
fermentation, ethanol production, fungi, *Fusarium oxysporum* 9344.
fermentation, ethanol production, *Pachysolen tannophilus* 171.
fermentation, ethanol production, *Pachysolen tannophilus* 3596.
fermentation, ethanol production, *Pachysolen tannophilus* 5281.
fermentation, ethanol production, *Pachysolen tannophilus* comparison *Pichia stipitis* 6136.
fermentation, ethanol production, *Pachysolen tannophilus*, trifluoroacetic acid hydrolysis, hemi-celluloses, straw, *Triticum aestivum* 8657.
fermentation, ethanol production, *Schizosaccharomyces pombe* 5294.
fermentation, ethanol production, yeasts 5285.
fermentation, 2,3-butanediol production, *Bacillus polymyxa* 5223.
metabolism, lignocelluloses conversion, *Candida* 3651.
utilization, bacteria, fungi, yeasts 3594.

D-Xylose,

hemicelluloses hydrolyses, fermentation, ethanol production, yeasts 6935.

Xylose isomerase,

Bacillus coagulans, immobilized enzymes, starch processing 111.
extracellular enzymes, characterization, *Chitin* 7742.
extracellular enzymes, production, *Chitin* 91.
gene expression, *Saccharomyces cerevisiae*, promoters, *Escherichia coli* 5157.
genes, *Escherichia coli*, cloning, use, ethanol, fermentation 983.
immobilization methodology, *Streptomyces olivocinereus* 5170.
immobilized enzymes, glucose isomerization, high-fructose corn syrup production 5145.

immobilized enzymes, kinetics, *Streptomyces phaeochromogenes* 70.

production, batch culture, continuous culture, *Arthrobacter globiformis* 6870.

production, *Streptomyces* 5167.

purification, characterization, *Flavobacterium arborescens* 6850.

reviews, biotechnology, bacteria 2597.

Streptomyces roseoflavus production, hemicelluloses hydrolysis, sodium hydroxide, bagasse, *Lolium* 5186.

Streptomyces roseoflavus, activity, immobilized cells 71.

Xylosyl,

acceptors, cellobiose, endo-1,4- β -D-xylanase, *Cryptococcus albidus* 3671.

Xylokininase,

genes, *Escherichia coli*, cloning, use, ethanol, fermentation 983.

Xylylase,

conversion, ethanol production, feedback inhibition, *Schizosaccharomyces pombe* 3644.

conversion, ethanol production, *Saccharomyces cerevisiae* 3643.

fermentation, ethanol feedback inhibition, *Schizosaccharomyces pombe* 3589.

D-Xylose, (continued)

production, GlucoBacchar suboxydases immobilized cells, D-arabitol conversion 949.

Yarrowia lipolytica,

2-hydroxyglutamic acid production 2560.
petroleum fermentation, single-cell protein production 5960.

Yeasts,

agar, isolation, fruits 9331.
alcohol dehydrogenase, electrophoresis, ethanol contamination 7687.
alcohol dehydrogenase, heavy metals inhibition, mechanisms, pH effects on 7686.
alcohol dehydrogenase, immobilized enzymes 1768.
alcohol dehydrogenase, immobilized enzymes, stability 4351.
aminocyclitol-IRNA synthetase, sedimentation 1801.
amylolytic enzymes production 8546.
antibiotics production, association, morphology 2255.
antibiotics production, fermentation, cheese production, industrial applications 9169.
antifungal activity, cyclosporin A 8312.
antifungal activity, essential oils, spices 8318.
antifungal activity, *Streptovorticillium rimofaciens* mildiomycon D 8373.
batch culture, ethanol production, growth, noise filters, computer applications 3630.
beer fermentation, antifungal agents effects on yeasts bitterness compounds formation 3587.
beer fermentation, wort addition, flavor 2691.
benzyl 2-methyl-3-oxobutyric acid reduction, α -methyl β -hydroxy esters biosynthesis 3560.
biochemical characteristics, cryopreservation, nitrogen (liquid) 6789.
biodegradation, fungi, bacteria, oxidation, reviews 7823.
biodegradation, hydrocarbons, reviews 8276.
biomass, association, ethanol production, whey+molasses substrates, aerobic conditions 1069.
biomass, nitrogen containing components 1063.
biomass, production, straw fermentation 8526.
blood culture, isolation, centrifugation+lysis 1529.
brewing, beer maturation, use, *Lactobacillus casei* acetolactate decarboxylase 7800.
bribe, fermentation, genetic engineering, biotechnology, conferences 3390.
carbon compounds biodegradation, oxidation, reviews 7823.
carboxypeptidase Y immobilized enzymes, peptide synthesis applications 63.
cell culture, cryopreservation 4222.
cell culture, nutrient requirements, biotin, growth factors, reviews 7787.
cell culture, synthetic carbohydrates 5928.
cellulose, fermentation 6955.
chromosomes DNA, separation methodology 9335.
cloning vectors, gene expression, hepatitis B surface antigen, hepatitis B virus vaccines production 6631.
cocoa fermentation 5323.
coffee fermentation 5324.
contamination, cheese, wines, filtration removal 192.
contamination, raw materials use production contamination 8342.
conversion, xylose, cellulose, fermentation, books 2539.
cytochrome c CYC1 gene, cloning 819.
dairy starters, fermented milk products, microorganisms 5329.
disintegration methodology, enzymes, proteins, isolation 4303.
dry, starter cultures 5339.
effects on flavor, beer 2683.
enolase, cadmium(II) activation, kinetics, dissociation 3485.
ergosterol biosynthesis, inhibition, antifungal activity, bifonazole, clotrimazole 8314.
ethanol fermentation 6127.
ethanol fermentation, toxins, growth rate inhibition 2679.
ethanol production, biotechnology, books 4234.
ethanol production, biotechnology, books, conferences 5943.
ethanol production, caplan effects on, *Zea mays* 3645.
ethanol production, corn, γ radiation effects on 151.
ethanol production, fermentation, cellulose, reviews 6107.
ethanol production, Sorghum juices Fermentation 5302.
ethyl α -formylpropanoate conversion,
ethyl(R)-(-)-3-hydroxy-2-methylpropanoate production 7768.
ethylmethylsulfonate mutagenesis, methionine over production, single-cell protein 5115.
extracts, detection, pentoxifylline metabolites, thin-layer chromatography, high-performance liquid chromatography 8433.
fatty acid composition, gas chromatography 836.
fermentation, alcoholic beverages 5273.
fermentation, beer, organoleptic evaluation, fermenters 6932.
fermentation, bread production 5332.
fermentation, cellulose, ethanol, production, methodology 7806.
fermentation, ethanol, beer 5327.
fermentation, ethanol optimization, production 8660.
fermentation, ethanol, wine, brandy 5279.
fermentation, glycerol production 7770.
fermentation, levels, zinc, copper, brewing 6128.
fermentation, monitoring, computer applications 5966.
fermentation, wine, *Phoenix dactylifera* 5288.
fermented food, olives 5331.
fermented food, reviews 5335.
Fermosin, ducks feeds, toxicity 5354.
floculation, biotechnology 2552.
fluorimetry, measuring techniques, proteins, amines, biotechnology 7556.
food contamination, ham, potassium sorbate, vacuum packaging, effects on food spoilage 3730.
food contamination, seafood 5343.
food contamination, seafood, Pisces 8712.
 β -D-fructofuranosidase immobilization 4333.
fuels, production, biotechnology, fermentation, methodology, reviews 7803.
germ tubes, API test detection 2528.
glyceraldehyde-phosphate dehydrogenase, cysteine residues, NAD⁺ fluorescent probes photoaffinity labeling 892.
growth, ammonium phosphate, vitamins, effects on, association wine 7869.
growth measurement, grapes juices, nephelometry photometry 7851.
heat shock, plants, essential oils, effects on 3064.

Yeasts, (continued)

hepatitis B surface antigen expression, vaccines production, hepatitis B virus 6628.
identification, AutoMicrobic test, methodology 1682.
identification, characterization, cereals contamination 5471.
identification methodology 7638.
immobilization, biomass support particles, fermentation, bioreactors 4219.
immobilization methodology 812.
immobilization, use, beer fermentation 8670.
immobilization, zeta potential 4221.
immobilized cells bioreactors, ethanol fermentation, molasses feeds contamination 6123.
immobilized cells, continuous culture, ethanol, production, microorganisms, contamination, molasses 7799.
immobilized cells, ethanol production 3639.
immobilized cells, ethanol production, batch culture 3619.
immobilized cells, use, production industries chemicals 6836.
inorganic pyrophosphatase hydrolysis 5'-O-(3-thiophosphate) 3511.
inorganic pyrophosphatase interaction, magnesium, manganese, phosphate ligands, X-ray scattering 3487.
isomaltose, production, purification 3534.
+lactic acid bacteria, mixed culture, fermentation, vegetables 7871.
linear plasmids cloning vectors construction 818.
lipids production, fatty acid composition 3583.
malate dehydrogenase, malate dehydrogenase, kinetics, poly(ethylene glycol) bound NAD⁺ derivatives effect on 76.
 α -mannans structure 8614.
marine environment isolates, biodegradation, oil 7310.
mathematical models, growth 1530.
media (isolation) 4225.
membranes, 1,3- β -D-glucans hydrolysis, glycosylation 1883.
metabolites, production, isolation 5241.
methyl-2-methyl-3-(2-furyl)-3-oxopropionate reduction,
methyl-2-methyl-3-(2-furyl)-3-hydroxypropionate production 4399.
microflora, bakery products, USSR 191.
mitochondria, adenosinetriphosphatase, binding adenosinetriphosphatase inhibitor 905.
mitochondria DNA isolation methodology 5086.
mitochondria tRNA, characterization, use, gels electrophoresis, methodology 3362.
morphology, growth, naphthazone, biosynthesis 6563.
Penicillium, methionine, over production, single-cell protein, yeasts 5115.
nitrogen composition, single-cell protein production 3728.
oxygen effects on ethanol production, musts 6122.
peat hydrolysates, fermentation, ethanol production 6930.
phenyl carbonic acids production, temperature effects on, wort fermentation, beer, 1987.
L-phenylalanine conversion, phenethyl alcohol production, cheese ripening 6993.
6-phosphofructokinase, purification, characterization 6007.
phosphogluconate dehydrogenase stability, comparison yeasts 73.
phosphoprotein phosphatase, phosphorylase phosphorylation, purification, characterization 933.
phosphorylase, phosphorylase kinase phosphorylation, comparison cyclic AMP dependent protein kinase 395.
polysaccharides, biosynthesis, industrial applications, reviews 8620.
production, ethane, ethylene, acetylene 8265.
proteins production optimization, genetic engineering 3423.
proteins, rheology 5321.
psychrophilic microorganisms, psychrotrophic microorganisms, lipolysis, proteolytic enzymes, food contamination, seafood 5340.
pyruvate carboxylase, acyl-CoA activation, aspartic acid inhibition 889.
RNA, DNA, isolation methodology, use, *Oerskovia xanthineolytica* lyticase, sodium dodecyl sulfate 8492.
RNA polymerase III, DNA binding, chromatography, ionic strength effects on 7704.
rubeomycin B biosynthesis, rubeomycin A transformation 1415.
Saccharum officinale fermentation, ammonium effects on 2754.
sedimentation, agitation, equipment, waste treatment 5848.
silage production 5350.
single-cell protein, amino acid composition, whey fermentation 1722.
single-cell protein, contamination, bacteria, wild type, continuous culture 1707.
single-cell protein, fermentation, reviews 2752.
single-cell protein, fermentation, starch 1721.
single-cell protein, production, fermentation, methodology 7880.
single-cell protein, production, fermentation, whey 1717.
single-cell protein production, petroleum fermentation 5960.
single-cell protein production, whey fermentation 3420.
single-cell protein, whey fermentation 1720.
species, cheese 5342.
spoilage, confectionery, water activity, pH, temperature, potassium sorbate effects on 8698.
spoilage, vacuum packaging, nitrogen packaging, luncheon meat 8715.
starter cultures, aroma, sausages 7858.
stereoselectivity, methyl 2-methyl-3-(2-thienyl)-3-oxopropionate reduction 6098.
stereoselectivity, methyl 3-phenyl-2-oxobutylate reduction, α -methyl β -hydroxy esters production 6097.
stereoselectivity, methyl 3-(2-furyl)-2-methyl-3-oxopropionate reduction, methyl 3-(2-furyl)-3-hydroxy-2-methyl propionates production 6096.
surfaces, interaction *Penicillium camemberti*, role aroma compounds, ripening, Camembert cheese 6186.
tetrahydrofolate synthase, antigenic characteristics, cross-reactivity, structure, formyltetrahydrofolate synthetase, *Clostridium acididurii* 8590.
transformation, books 842.
transformation methodology 816.
transformation methodology 817.
use, oil, molasses, microorganisms growth association, kinetics mathematical models 2530.
vertical distribution, indigenous species, ground water 5816.
viability, ethanol production 3632.
wine production, fatty acids by-products, inhibition, fermentation 5286.
wort fermentation, beer brewing 984.
xylan, conversion, triglycerides, characterization 4402.
xylose fermentation, ethanol production 5285.
D-xylose fermentation, hemicelluloses hydrolysates, ethanol production 6935.
xylose utilization 5594.

Yellow fever virus,

antigens, detection, agglutination, protein A 4991.
vaccines, assays 6590.

- Yellow mosaic virus**, plant diseases, *Phaseolus aureus*, disease control, vectors, Aleyrodidae 3878.
- Yellow rust**, *Puccinia striiformis*, *Triticum aestivum*, pathogenesis 4515.
- Yellows**, fungi, disease resistance, plant breeding, *Pennisetum clandestinum* 294. *Fusarium oxysporum* f.sp.apii, biological control, non-pathogenic strains, *Apium graveolens* 6306. *Fusarium oxysporum* f.sp.apii, disease resistance, inheritance, *Apium graveolens* 8066. *Spiroplasma citri* isolation, disease transmission vectors, *Colladonus montanus*, *Scaphytopius nitridus* 8021. *Xanthomonas campestris* pv.hyalanthi, *Scilla tubergeniana* 2042.
- Yersinia**, identification, AutoMicrob test 1645. incidence, cow's milk, yersiniosis epidemiology, man, Japan 7007. potassium hydroxide, isolation methodology, feces 896. survival, drinking water, membrane filtration recovery 1494. virulence, bioassays, agglutination 6758.
- Yersinia enterocolitica**, antibacterial activity, ciprofloxacin 4744. antibiotic resistance, chlorination effects on, sewage isolates 6437. antibiotic sensitivity testing, clinical isolates, animal isolates 7398. cefmenoxime antibacterial activity, comparison, cefotaxime, moxalactam 1388. clinical isolates recovery, media (selective) methodology 1594. enterotoxins production, food contamination 8753. esterase, electrophoresis, isoelectric focusing 8856. isolation, feces, potassium hydroxide treatment effects on 3285. media (selective), feces 709. milk food contamination 7004. phage typing, antibiotic sensitivity testing, identification 694. recovery, media (isolation), environments 9327. sodium chloride antibacterial activity 9101. virulence, measuring techniques, Congo red agar 749. virulence, plasmids characterization 6781.
- Yersinia frederiksenii**, phage typing, antibiotic sensitivity testing, identification 694.
- Yersinia intermedia**, bacteriocins, antibacterial activity, physicochemical properties 522. phage typing, antibiotic sensitivity testing, identification 694.
- Yersinia kristensenii**, phage typing, antibiotic sensitivity testing, identification 694.
- Yersinia pestis**, antibiotic resistance, chlorination effects on, sewage isolates 6437.
- Yersinia pseudotuberculosis**, sodium chloride antibacterial activity 9101.
- Yersinia pseudotuberculosis subsp.pestis**, antibodies, antigens, detection, protein A agglutination 5029. antigens, detection, tissues, radioimmunoassay 1574. identification methodology, isoflourate fusing assays 1623. neuraminidase, purification, characterization 8566.
- Yersinia pseudotuberculosis subsp.pseudotuberculosis**, endotoxins, lipid A proteins complex, characterization, purification 3763. esterase, electrophoresis, isoelectric focusing 8856.
- Yersinia ruckeri**, media (isolation) 9326.
- Yersiniosis**, epidemiology, man, Yersinia incidence, cow's milk, Japan 7007.
- Yield**, *Arachis hypogaea*, leafspot, *Cercospora arachidicola*, *Cercosporium personatum*, effects on 7934. *Dioscorea alata*, leafspot, *Colletotrichum*, factors affecting 4588. *Gorse* max, *Rhizobium* inoculation effects on 5677. *Gossypium barbadense*, association, fungicides disease control *Alternaria macrospora* infection 321. growth conditions, *Candida utilis* 801. *Helianthus tuberosus*, plant diseases effects on, *Puccinia helianthi*, *Erysiphe cichoracearum*, *Sclerotium rolfsii* 5457. *Hordeum vulgare*, barley stripe mosaic virus, infection, seeds, effects on 4516. *Oryza sativa*, pathogenesis, plant diseases, tungro virus 4514. *Pinus taeda*, *Pinus elliottii* var. *elliottii*, relationship, fusiform rust pathology location 8943. powdery mildew, *Erysiphe graminis*, effects on, *Triticum aestivum*, Bulgaria 7959. *Solanum tuberosum*, association, infection, potato virus X, potato virus Y, potato leaf roll virus, methidathin foliar applications effects on 8019. *Solanum tuberosum*, *Fusarium* plant diseases effects on 7173. *Solanum tuberosum*, metam + sodium use irrigation, disease control, *Verticillium dahliae* infection, effects on 1209. *Solanum tuberosum*, Zea mays, bacteria inoculum soil amendment effects on 8201. *Sorghum bicolor*, *Azospirillum* inoculation effects on 5657. *Sorghum bicolor*, *Azospirillum* inoculation effects on 6367. *Triticum aestivum*, commercial microorganisms soil amendment effects on 8960. *Triticum aestivum*, fungi infection, fungicides disease control, USA, Idaho 7951. *Triticum aestivum* genotypes, leaf rust, powdery mildew, effects on, fungi 8098. *Triticum aestivum*, infection, *Fusarium*, *Seporia nodorum* 7948. *Triticum*, *Hordeum vulgare*, fungicides, field trials, effects on 327. *Tubers*, *Ipomoea batatas*, *Esinca batatas* sack 8007. *Vigna radiata*, bean common mosaic virus, nitrogen, effects on 4511. *Vitis vinifera* clones, leaf-roll, genetic variance, effects on 8859. *Vitis vinifera*, plant diseases, grapevine leaf roll virus, growth 4536.
- Yogurt**, dairy starters, buffaloes milk, *Lactobacillus bulgaricus*, *Streptococcus thermophilus* 6869. dairy starters, counting methods, ATP assays 6996. dairy starters, lactose utilization, man, lactic acid bacteria 4452. fermented milk products, *Lactobacillus bulgaricus*, feed efficiency, rats 7011. media (isolation), *Lactobacillus bulgaricus*, *Streptococcus thermophilus* 7006. production, mathematical models, lactic acid bacteria 6190. production, microorganisms role, quality control, books 5097. production, milk fermentation, dairy starters, continuous culture, lactic acid bacteria 6997.
- Yolk**, agar, media (culture), enumeration, *Clostridium sporogenes*, spores, methodology 674. containing media (culture), *Mycoplasma pneumoniae* growth 1874. effects on physicochemical properties, *Streptococcus faecalis* subsp.liquefaciens
- Yolk**, (continued) 6982.
- Yolk sac**, chick embryos, *Rickettsia prowazekii* DNA purification, deoxyribonuclease treatment 5033.
- Yugoslavia**, animals feeds, mycotoxicosis association ingestion 7048.
- Zaire**, aflatoxins detection, food, man, animals feeds 7057.
- Zambia**, *Nicotiana tabacum*, identification, detection, tobacco vein mottling virus 6271.
- Zea mays**, aflatoxins, agriculture, fungi, fluorescence, *Aspergillus flavus* 4474. aflatoxins levels, *Aspergillus flavus* 6204. alkaline food processing, industrial wastes, wastewater treatment 8402. *Aspergillus flavus* pathogenesis, scanning electron microscopy 6245. barley stripe mosaic virus infection, alcohol dehydrogenase Adh1 gene mutation, nucleotide sequence 7152. Basidiomycetes plant diseases, pathogenesis 1111. black rot, *Cochliobolus carbonum*, races, virulence, genetic variance, recombination, USA, North Carolina 7962. captan effects on ethanol production, yeasts 3645. carboxin translocation, *Gibberella zeae* root rot, *Puccinia sorghi* leaf rust effects on 259. colonization, *Fusarium moniliforme*, irrigation effects on seed-borne diseases 7947. comparison, grain, aflatoxins production, food contamination, factors affecting, reviews 7052. crop residues, *Chaetomium cellulolyticum* fermentation, n-butylamine pretreatment 183. crop residues, coupling, β -D-fructofuranosidase, immobilization 8551. crop residues, lignin, biodegradation, *Trichosporon penicillium* 6950. crop residues, silage, fermentation, effects on digestibility, cattle 7877. crop rotation, *Triticum aestivum*, herbicides effects on soil microorganisms 2929. detection *Aspergillus parasiticus* aflatoxins food contamination, use, chromatography methodology 7088. disease resistance, host-pathogen interactions, *Erwinia chrysanthemi* 3880. disease resistance inheritance, *Puccinia polysora* root 8071. disease resistance plant breeding, Africa 8895. downy mildew, *Peronosclerospora sorghi*, disease control, foliar applications, metalaxyl, eflosite-AI 8126. downy mildew, *Peronosclerospora sorghi*, disease control, seed treatments, metalaxyl, eflosite-AI 8144. ear rot, sclerotia formation, *Aspergillus flavus* 8784. endospore, mutants, *Fusarium moniliforme*, infection, effects on, seedlings 3804. enzyme-linked immunosorbent assay, detection, T-2 toxin, *Fusarium sporotrichoides* 5365. epidemics, leaf blight, relationship, mat. gene, Cyl gene, Ab1 gene, *Cochliobolus heterostrophus* 3805. food contamination, mycotoxins, intoxication, cattle 6205. free radicals levels, ear, anthers, flowers, smut, *Ustilago maydis* 5433. *Fusarium* ear rot, mycotoxins detection 7083. genes, roots bioassays, phytotoxins, *Helminthosporium maydis* 8754. genotypes, disease resistance, aflatoxins contamination, *Aspergillus flavus* 8880. genotypes, effects on, fitness, *Helminthosporium carbonum*, leafspot 7971. germplasm comparison, disease resistance, maize dwarf mosaic virus 8091. *Gibberella zeae* ear rot disease resistance screening protocols 4580. grain, aflatoxins, analysis, thin-layer chromatography, high-pressure liquid chromatography, fatty acid fluorescence, aflatoxins 8726. growth, nutrient uptake, inoculation, vesicular-arbuscular mycorrhizas 7257. head smut, *Sphecotheca reiliana*, inoculation equipment 254. *Helminthosporium carbonum* disease resistance suppression, *Helminthosporium maydis* inoculation 1169. *Helminthosporium carbonum*, phytotoxins, structure-activity relationships 1983. *Helminthosporium turcicum* blight, Egypt, Arab Rep. 2792. hybrids, endospore characterization association aflatoxins contamination, environmental effects 8724. hybrids, seeds, *Aspergillus flavus* growth, aflatoxins biosynthesis 8083. leaf blight, *Cochliobolus heterostrophus*, auxotrophs, population studies 1981. leafspot, Hungary, *Macrophoma zeae* 7969. leafspot, *Hyalothyridium maydis* sp.nov. 7983. leafspot, stalk rot, *Marsellius*, Mexico 8794. maize dwarf mosaic virus disease resistance transfer, genetic analysis 4584. maize dwarf mosaic virus infection, disease resistance, genetic control 2836. maize streak virus, disease transmission, *Auchenorrhyncha* 7154. mitochondria, calcium transport, inhibition, T toxin, *Helminthosporium maydis* 7155. phytoplane electrical properties, phytopathogenic fungi spores discharges 7143. phytoplane electrical properties, phytopathogenic fungi spores discharges 7925. phytotoxins, *Helminthosporium maydis*, structure-activity relationships, analogs 1955. plant breeding, disease resistance, field trials, maize dwarf mosaic virus 5495. plant breeding, disease resistance, seeds infection, *Fusarium moniliforme* 8074. plant breeding, hybrids, disease resistance, *Gibberella zeae*, ear rot, zealarone, 4-deoxynivalenol, production 1180. plant diseases, barley yellow dwarf virus, susceptibility 4513. rhizosphere, bacteria population levels 7284. root rot, phytopathogenic fungi, etiology 7952. root rot, *Pythium*, *Fusarium*, soils (sandy) 1998. root rot, stalk rot, role, *Phialophora zeicola* sp.nov., South Africa 264. roots, colonization, bacteria, interspecific relationships, bioassays 4639. roots colonization, calcium oxide, soil amendment effects on soil pH, *Glomus mosseae*, *Glomus*, *Glomus* 6299. roots, membrane potential, protons pumps, fusicoicin effects on 8739. rust, *Puccinia sorghi*, virulence 5423. seed germination, seed treatments, benomyl, tiabendazole 2094. seed treatments, captan, benomyl, fungi, disease control 2093. seeds, detection, *Peronosclerospora sorghi*, oospores 7964. seeds, fungi infection, climatic conditions 1992. seeds, *Gibberella zeae*, *Nigrospora oryzae*, symptomless infection, role, *Pythium debaryanum* infection 8792. seeds, levels, fusicoicin, infection, *Fusicoicum amygdali* 8740. silage, ammonia pretreatment effects on fermentation 4467.

Zea mays, (continued)

- silage, fermentation, acid production, lactic acid bacteria 7873.
- silage, fermentation, inoculation, lactic acid bacteria 7876.
- silage, spoilage, microorganisms, γ radiation prevention 6202.
- smut, *Sphacelotheca reiliana*, factors affecting incidence 8795.
- stalk rot, *Erwinia chrysanthemi*, klorocin disease control, tissues persistence 8929.
- stalk rot, *Fusarium graminearum*, overwintering, crop residues, USA, Minnesota 7967.
- starch, sweeteners production, immobilized enzymes, microorganisms 5188.
- susceptibility, *Helminthosporium T-toxin*, reviews 1123.
- yield, bacteria inoculum soil amendment effects on 8201.
- yield, inoculation, *Azospirillum brasilense*+vesicular-arbuscular mycorrhizas, nitrogen fixation, nutrient uptake 1257.
- yield, vesicular-arbuscular mycorrhizas, inhalation, fertilizer applications+composts 3948.

Zearalenol,

- detection, media (culture), *Fusarium*, methodology 3748.

 α -Zearalenol,

- conversion, zearalenone biosynthesis, *Fusarium roseum* 6100.

 β -Zearalenol,

- conversion, zearalenone biosynthesis, *Fusarium roseum* 6100.

Zearalenone,

- biosynthesis, *Fusarium roseum*, conversion, α -zearalenol, β -zearalenol 6100.
- detection, animals feeds, methodology, use, high-performance liquid chromatography, thin-layer chromatography 7053.
- detection, *Fusarium ear rot*, *Zea mays* 7083.
- detection, media (culture), *Fusarium*, methodology 3748.
- food contamination, man, animals, screening, methodology, reviews 7079.
- Fusarium*, biosynthesis, role, plant diseases, reviews 7100.
- Fusarium*, incident, wheat, barley, rye, corn 1079.
- incidence, wheat 1927.
- mycotoxicosis, association ingestion animals feeds, Yugoslavia 7048.
- production, *Fusarium*, scab, Gramineae, animals ingestion, toxicity, reviews 7056.
- production, *Gibberella zeae*, ear rot, disease resistance, plant breeding, hybrids, *Zea mays* 1180.

Zela chlorophthaima,

- host-pathogen interactions, host-parasite interactions, predator-prey interactions, *Spodoptera littoralis*, *Bacillus thuringiensis*, *Paederus affertii*, Egypt, Arab Rep. 128.

Zephyranthes,

- disease resistance, infection, *Sclerotium cepivorum* 8043.

Zeta potential,

- immobilization, yeasts 4221.

Zimmermanella trispora,

- leafspot, *Mangifera indica* 8808.

Zinc,

- alanine carboxypeptidase containing, active sites inhibition, heavy metals, β -lactam antibiotics, *Streptomyces albus* 5985.
- biomass levels, nutrient cycles, soil microorganisms 6347.
- Cicer arietinum*, effects on nitrogen fixation, nodulation, *Rhizobium* 4650.
- +hexetidine, drug synergism, antibacterial activity, *Streptococcus mutans* 5860.
- levels, brewing, fermentation, yeasts 6128.
- levels, chickens feeds, correlation aflatoxin contamination 4473.
- nutrient requirements, *Aspergillus aflatoxins* biosynthesis 7068.
- nutrient uptake, mycorrhizas, plants 5627.
- nutrient uptake, stimulation, vesicular-arbuscular mycorrhizas, *Arachis hypogaea* 5641.
- oxides, inhibition *Rhizobium leguminosarum* var. *trifolii* nodulation, *Trifolium* 7294.
- sensitivity, soil microorganisms 1261.
- versicolorinis production, effects on, *Aspergillus parasiticus* 7887.

Zinc chloride,

- pretreatment, cellulose, hydrolysis, cellulase 3656.

Zinc proteinase,

- interaction oxymino-cephalosporins, structure-activity relationships, *Streptomyces* 6832.

Zinnia,

- bidens mottle virus infection susceptibility 3825.

Zinniol,

- production, phytotoxins, *Alternaria* 7903.

Zizania aquatica,

- Colletotrichum sublineolum* anthracnose 1135.

Zizyphus mauritiana,

- post-harvest decay, fruit rot, fungi 8876.

Zoogloea,

- biodegradation organic compounds, activated sludge 7490.

Zoogloea ramigera,

- copper bioaccumulation, polysaccharides adsorption 3975.
- polysaccharides, adsorption, bioaccumulation, heavy metals 3973.

Zoological gardens,

- Reptilia, *Salmonella* cultivation techniques, feces 4208.

Zoophthora radicans,

- sporulation, temperature effects on, mortality, biological control, *Therioaphis trifolii* 1855.

Zoospores,

- survival, *Phytophthora cinnamomi*, *Rhizobium*, effects on 7262.

Zucchini yellow mosaic virus,

- disease resistance, inheritance, zym gene, linkage analysis, *Cucumis melo* 5478.
- host range, USA, Florida 3815.
- plant diseases, *Cucumis sativus*, Lebanon 4544.
- plant diseases, *Cucurbitaceae*, USA 6269.

Zulia,

- biological control, *Metarhizium anisopliae* inoculum production, factors affecting 5266.

Zygomycetes,

- ectomycorrhizas, leaves, *Tozzia alpina* 8204.

Zymomonas,

- sucrose fermentation, ethanol production, reactors 153.

Zymomonas anaerobia,

- Clostridium saccharolyticum*, mixed culture, ethanol production, fermentation, cellobiose, glucose, xylose, mixtures 8661.

Zymomonas mobilis,

- acridine orange, mutagenesis, ethanol production 5267.
- batch culture, glucose fermentation, ethanol production 3602.

Zymomonas mobilis, (continued)

- calcium+algin immobilized cells, ethanol production 2675.
- carbon sources, effects on, growth, morphology, ethanol, production 3615.
- carrageenans immobilized cells, glucose fermentation, ethanol production 5300.
- ethanol fermentation 2694.
- ethanol, fermentation 3614.
- ethanol production 3591.
- ethanol production 3638.
- ethanol production 5274.
- ethanol production 7795.
- ethanol production, bioreactors 5293.
- ethanol production, comparison 986.
- ethanol production effects on growth 5282.
- ethanol, production, fermentation, methodology, reviews 6109.
- ethanol production, fructose substrates, factors affecting, kinetics 148.
- ethanol production, sugars fermentation, starch, pretreatment, amylolytic enzymes 8663.
- ethanol production, wood hydrolysates, hydrogen fluoride pretreatment 5270.
- fermentation, extracellular levels, ethanol, carbon dioxide, effects on 149.
- flour stimulation, ethanol fermentation 2680.
- fructose, concentration, effects on, ethanol, production 996.
- fructose fermentation, ethanol production 6929.
- genetic engineering, ethanol, production, fermentation, reviews 6112.
- glucose isomerase, activity 6678.
- immobilized cells, bioreactors, ethanol production 3618.
- immobilized cells, ethanol, fermentation 166.
- immobilized cells, ethanol production, bioreactors 3634.
- immobilized cells, interaction, β -D-glucosidase immobilized enzymes 18.
- isolation methodology, relationship ethanol production 4415.
- ligands chromatography 4294.
- phospho-2-keto-3-deoxy-gluconate aldolase, purification, characterization, dyes 4294.
- phosphogluconate dehydratase, purification, characterization, affinity chromatography 4293.
- sucrose fermentation, ethanol production, reactors 153.



cambridge scientific abstracts

ABSTRACTS JOURNALS ☐ ONLINE ☐ MAGNETIC TAPE

JOURNALS

Animal Behavior Abstracts® **Aquatic Sciences & Fisheries Abstracts®:**

Part 1 - Biological sciences & living resources.

Part 2 - Ocean technology, policy & non-living resources.

CSA® Aquaculture Abstracts

Biochemistry Abstracts:

Part 1 - Biological Membranes

Part 2 - Nucleic Acids

Part 3 - Amino-acids, Peptides & Proteins

Biotechnology Research Abstracts

Calcified Tissue Abstracts®

Chemoreception Abstracts®

Computer & Information Systems

Abstracts Journals

Conference Papers Index®

CSA Neurosciences Abstracts

Ecology Abstracts®

Electronics & Communications

Abstracts Journal

Entomology Abstracts®

Genetics Abstracts®

Immunology Abstracts®

ISMEC (Information Service in

Mechanical Engineering) Bulletins

Microbiology Abstracts®

Part A - Industrial & Applied

Part B - Bacteriology

Part C - Algology, Mycology, Protozoology

Oceanic Abstracts®

Pollution Abstracts®

Safety Science Abstracts Journal

Solid State Abstracts Journal

Toxicology Abstracts®

Virology Abstracts®

BACK VOLUMES

Back volumes are available for all CSA journals more than one year old, in either printed or microfiche form.

MAGNETIC TAPE

The CSA journals are available on magnetic tape in machine-readable form for current awareness and retrospective batch searching. Contact CSA Marketing Department for specifications and prices at 301-951-1403.

ONLINE

Some of the above journals are available in differing online information systems including:

- ☐ DIALOG® Information Retrieval Service
- ☐ Bibliographic Retrieval Service
- ☐ Information Retrieval Service (European Space Agency)
- ☐ System Development Corporation Search Service.

For further details contact CSA Database Services, toll free at 800-638-8076. In Maryland and outside continental U.S., call 301-951-1300.

Microbiology Abstracts